Appendix F

Metropolitan Planning Organization Regional Toll and Managed Lane Analysis - July 2014

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Regional Toll and Managed Lane Analysis

Alamo Area Metropolitan Planning Organization

July 2014

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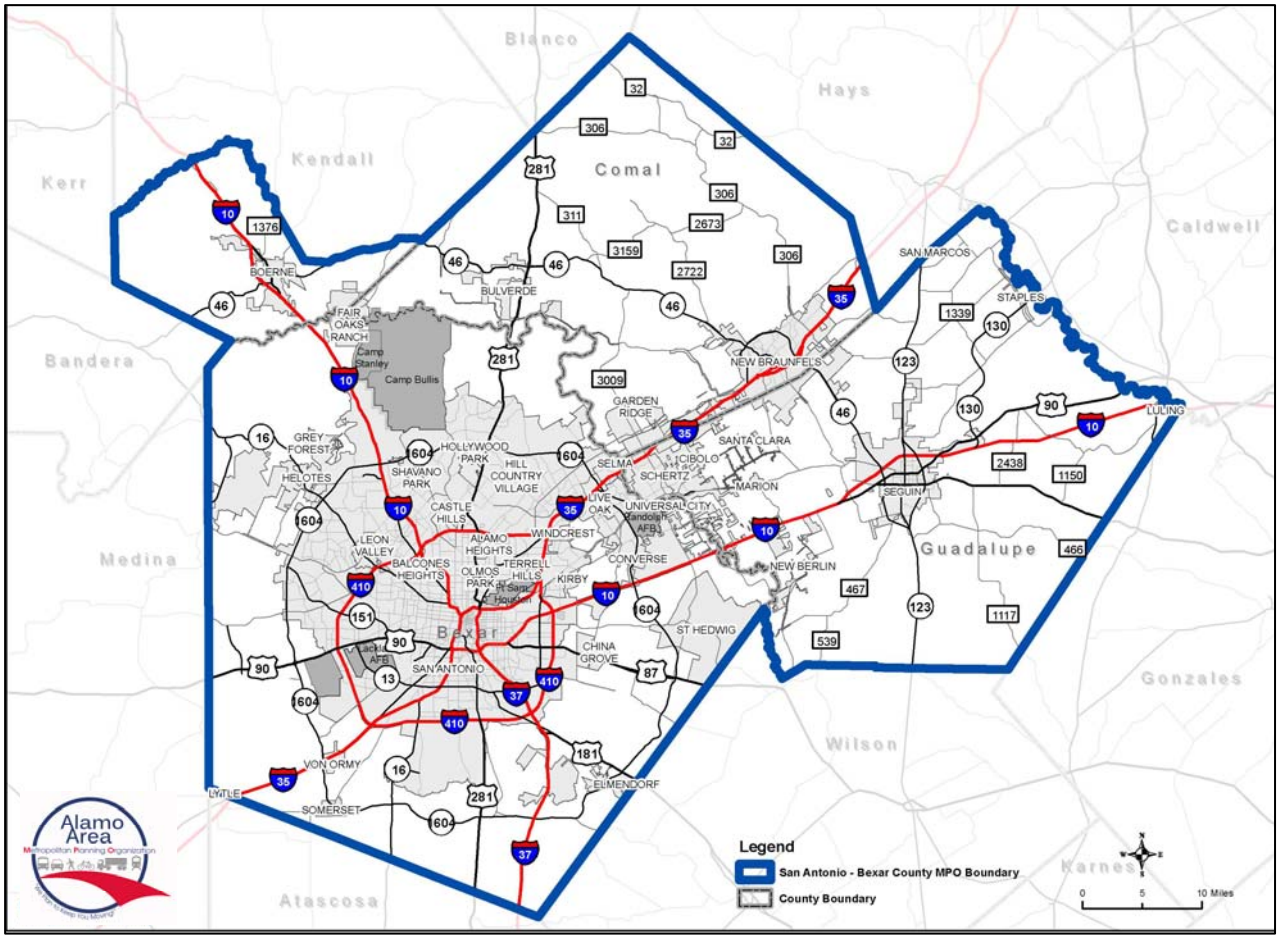
Purpose

The Alamo Area Metropolitan Planning Organization (MPO), serving all of Bexar, Comal and Guadalupe Counties and a portion of Kendall County (see Figure 1), is charged with planning for transportation throughout the region.

Figure 1. Alamo Area MPO Study Area



In 2035, within the expanded MPO study area, the freeway, managed & expressway system (including ramps and direct connectors) represents 24.7% of the lane miles of the non-local (defined as including collector, arterial, managed lane, expressway & freeway) roadway types, 48.9% of the non-local vehicle miles of travel and 40.5% of the non-local vehicle hours of travel. The managed lane (tolled) system represents 3.9% of the non-local lane miles, 6.2% of the non-local vehicle miles of travel, and 4.2% of the non-local vehicle hours of travel. As of early 2014, the only tolled lanes operating within the MPO study area are on the southern extension of SH 130 from the Guadalupe County line to Seguin.

VIA Metropolitan Transit is the regional public transportation authority, with a service area encompassing approximately 1,226 square miles. Alamo Regional Transit (ART) service, operated by the Alamo Area Council of Governments, serves twelve rural counties. The region currently has no high occupancy vehicle lanes; with the exception of some dedicated transit travel lanes in downtown San Antonio, all transit service operates in mixed flow transit. "Mobility 2035" currently shows only minimal improvements to transit service due to limited funding availability.

Future growth in travel will be mitigated somewhat by proposed improvements to the transit system and improved arterial operations, but regional population and employment growth coupled with declining state and federal revenues will likely require implementation of toll/managed lane facilities.

In the most recent toll policies and procedures adopted by the Alamo RMA in April 2012, the RMA has defined a toll lane as a lane operated by the Alamo RMA as a traditional turnpike lane with a fixed fee for usage paid by all drivers unless exempted by state law or the same adopted policies and procedures. The same document also defines a managed lane as a travel lane that allows transit, registered car pool users with a tag account, and vehicles exempted by state law to use the facility for no charge. All other vehicle types will be charged a toll fee for usage of the lane. At this time variable pricing is not part of the adopted policies and procedures and is not part of the subsequent analysis.

This analysis focuses on the proposed toll/managed lane system for the Alamo Area region. All of the planned toll/managed lanes are in existing expressway corridors as shown in Figure 2. No conversion of existing non-toll facilities to toll/managed lanes is being considered. The new toll/managed lanes will either be constructed within existing right-of way, new right-of-way will be purchased, or the facilities will be elevated.

It is important to note that two of the corridors, US 281 North and Loop 1604, currently have environmental documents under development. This Toll and Managed Lane Analysis is based on how projects in these two corridors plus projects in the IH 35 North and IH 10 West corridors are listed in the Transportation Improvement Program and Metropolitan Transportation Plan as of a local approval date of July 22, 2013. If the project descriptions in these two documents change, that may impact the results of this analysis. The extent of that impact is not known; however; if the number of lanes are revised it is expected that there will be some impact, albeit minor, on the results of this analysis. It is the MPO's intent for this analysis to always be consistent with the current version of the MTP project list. While the MPO generally revises the MTP project list on a quarterly basis (consistent with revisions to the Transportation Improvement program/Statewide Transportation Improvement Program), the extent of the amendments varies. The last major update of the MTP was approved in December 2009; the next major Plan update is scheduled to be approved in December 2014.

Much of the information contained in this document is more fully detailed in the SA-BC MPO's Metropolitan Transportation Plan, "Mobility 2035", available at http://www.sametroplan.org/Plans/MTP/mobility2035.html. Chapters include:

Chapter 1. Demographic Development
Chapter 2. Scenario Planning
Chapter 3. Public Involvement Process
Chapter 4. Bicycle System
Chapter 5. Pedestrian System
Chapter 6. Public Transportation Services
Chapter 7. Roadway Needs
Chapter 8. Freight Movement
Chapter 9. Environmental Concerns
Cahpter 10. Congestion Management Process
Chapter 11. Financial Information

Toll and Managed Lane System

Project Descriptions

The managed lane projects are described in the FY 2013-2016 Transportation Improvement Program and Metropolitan Transportation Plan (as of April 28, 2014) as shown in Table 1 and the managed lane projects in the Metropolitan Transportation Plan (only) are shown in Table 2.

Table 1. Managed Lane Projects in the FY 2013-2016 Transportation Improvement Program and Metropolitan Transportation Plan ("Mobility 2035") (as of April 28, 2014)

CSJ	MPO No.	Roadway	Limit From	Limit To	Description	Let Year
0253-04-138	3781	US 281	Stone Oak Parkway	Bexar/Comal CL	Expand to 4 lane expressway (construct 4 new managed lanes)	2015
0253-04-146		US 281	Loop 1604	Stone Oak Parkway	Expand to 6 lane expressway (4 non-toll & 2 managed lanes) & non-toll northern interchange connectors at Loop 1604	2015
0072-08-089		IH 10	1.40 Mi S of Leon Springs, S	Loop 1604	Expand from 4 to 6 lane expressway (construct 2 new managed lanes)	2016
0072-07-041		IH 10	FM 3351	1.40 Mi S of Leon Springs	Expand from 4 to 6 lane expressway (construct 2 new managed lanes)	2016
2452-02-900		Loop 1604	At IH 10 West		Construct managed lane direct connectors	2016

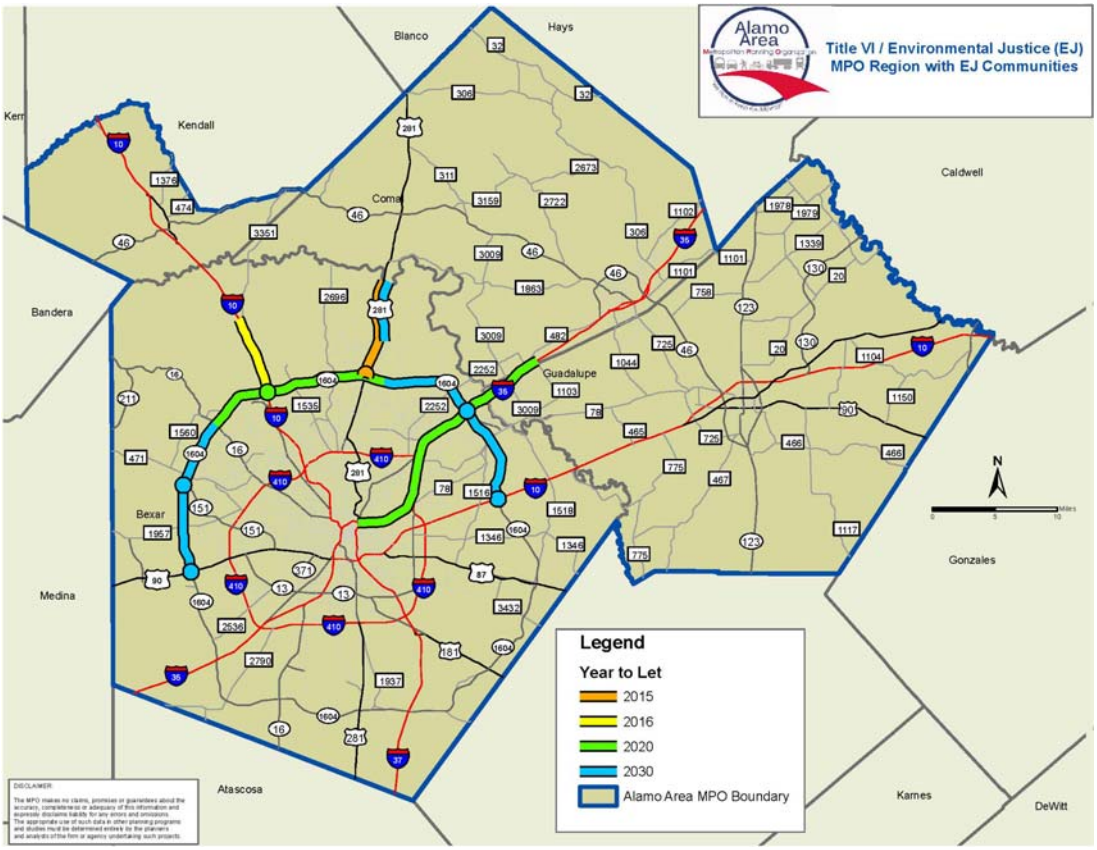
Table 2. Managed Lane Projects in the Metropolitan Transportation Plan (Only) (as of April 28, 2014)

CSJ	MPO No.	Roadway	Limit From	Limit To	Description	Let Year
2452-01-029	2020	Loop 1604	US 90	W. Military Drive	Expand to 6 lane expressway (construct 2 new managed lanes) including managed lane direct connectors at US 90	2030
2452-01-052	3911	Loop 1604	W Military Drive	Braun Road	Expand to 6 lane expressway (construct 2 new managed lanes) including managed lane direct connectors at SH 151	2030
2452-01-053	3912	Loop 1604	Braun Road	SH 16	Expand to 8 lane expressway (construct 4 new managed lanes)	2030
2452-02-083	3913	Loop 1604	SH 16	FM 1535 (NW Military Highway)	Expand to 8 lane expressway (construct 4 new managed lanes) including managed lane direct connectors at IH 10	2020
2452-02-940	3914	Loop 1604	FM 1535 (NW Military Highway)	US 281	Expand to 8 lane expressway (construct 4 new managed lanes)	2020
2452-03-945		Loop 1604	US 281	Redland Road	Expand to 8 lane expressway (construct 4 new managed lanes)	2020
2452-03-087	3530	Loop 1604	Redland Road	IH 35 North	Expand to 8 lane expressway (construct 4 new managed lanes) including managed lane direct connectors at IH 35	2030
2452-03-081	2021	Loop 1604	IH 35 North	IH 10 (East)	Expand to 4 lane expressway (construct 4 new managed lanes) including managed lane direct connectors at IH 35 N and IH 10 E	2030
0253-04-xxx		US 281	Stone Oak Parkway	Bexar/Comal County Line	Expand to 6 lane expressway (construct 2 additional managed lanes)	2030
0017-10-180	3514	IH 35 North	US 281/IH 37, East	IH 410 S	Expand from 6 to 10 lane expy (add four new managed lanes); Env study req; project is subject to change	2020

CSJ	MPO No.	Roadway	Limit From	Limit To	Description	Let Year
0017-10-168	61.2	IH 35 North	IH 410 S	IH 410 N	Exp 8 to 12 lane expy (add 4 new managed lanes) incl managed lane conns at IH 410 N & IH 410 S; Env study req; project is subject to change	2020
0016-07-113	3477	IH 35 North	IH 410 N	0.2 Mi S of Schertz Parkway	Exp from 8 to12 lane expy (add 4 new managed lanes) incl managed lane conns at Loop 1604; Env study req; project is subject to change	2020
0016-06-900	4013	IH 35 North	Bexar/ Guadalupe County Line	Guadalupe/ Comal County Line	Exp from 8 lane to12 lane expy thru FM 3009; then 6 to 10 lane expy from FM 3009 to Comal CL (add 4 new managed lanes); Env study req; project is subject to change	2020
0016-05-900	4014	IH 35 North	Guadalupe/ Comal County Line	FM 1103	Exp from 6 lane to 10 lane expy; (add 4 new managed lanes); Env study req; project is subject to change	2020

From the project descriptions and the alignments as shown in Figure 2, all of the managed lane projects are in existing travel corridors and that a general purpose (non-tolled or managed lane) lane alternative will be available within each alignment.

Figure 2. Proposed Managed Lane System



Travel Demand Model Applications and Limitations

The MPO's travel demand model is the primary analysis tool for this effort and the current MPO study area is considered in the analysis. The model is a traditional four-step travel demand model that forecasts daily traffic and transit ridership for either a typical 24-hour weekday or for a combined a.m./p.m. peak period. The model characteristics have been calibrated and validated for year 2008 and are used to project travel for forecast years 2015, 2025 and 2035. For this analysis, only modeling results for years 2015 and 2035 are used. During the time of model calibration and validation, operational toll/managed lanes and passenger rail services were not part of the transportation system.

For the current MTP, the toll/managed lanes as shown in Figure 2 are expected to be operational by the Plan horizon year of 2035. Traffic estimation for toll/managed lanes is performed within the Traffic Assignment step of the regional model using the TransCAD Multi-modal, Multi-class, User equilibrium vehicle assignment process. This routine basically allows for the application of multiple tolls and multiple values of time for different types of vehicles and traveler - in this application for regular vehicles (cars and personal use trucks) vs. commercial vehicles (defined as 8,500 pounds or heavier with 6 or more tires).

Although the toll charges (generally expressed as cents per mile) are higher for commercial vehicles, the value of time for commercial vehicle operators is also assumed to be higher. Thus, toll/managed lane usage is based upon the traveler's willingness to pay for time savings. For modeling applications, the values of time for regular vehicle operators is $16.50 per hour and for commercial vehicle operators is $40.00 per hour. These values have not been calibrated specifically to the San Antonio region because of the absence of existing operational toll/managed lanes, but they are similar to those used in regions with toll facilities and do result in reasonable traffic forecasts.

More refined estimates of toll/managed lane volumes, often referred to as Traffic & Revenue Studies are typically performed by consultant firms that specialize in "Bond Grade Toll Analyses", which are required for the bonding and funding of toll facilities. These, more detailed, travel corridor type studies usually entail a more complete review of demographic forecasts, Traffic Analysis Zone (TAZ) configurations, current traffic counts, vehicle mix, transit use considerations, peaking characteristics and travel (O-D) patterns within the corridor.

Regional models should be used in the context of what they were developed for: a regional sense of travel demand and movement. Detailed work can be performed by using the model for corridor analysis but should be followed up with additional data collection and analysis including traffic counts, mode share data, vehicle composition, origin – destination patterns and stated preference surveys to make the model representative of the corridor being studied. This detailed work is beyond the scope of this effort. Any data analysis done for peak hour traffic conditions needs to be confirmed with actual field data for the specific peak period.

Demographic Development

Control Totals

The basis of any effective planning effort rests primarily on a determination of the area's base year demographics and projections of these demographics. The MPO used 2005 as the base year for the December 2009 update of the MTP. For the future years, various federal and state government data sources were used for the population and employment forecast control totals in five-year increments to the year 2035 for the San Antonio region.

The process for forecasting and distributing future growth in population and employment is not an exact science. Multiple forecasting models exist with differing assumptions and results. What is needed for the transportation planning process is a "comfort level" with the demographic control totals used to predict future travel. The tendency is to be more comfortable with the recent trends. If the economy is doing well and jobs and housing are expanding, the tendency is to select an optimistic forecast. The tendency to select a conservative forecast usually occurs if the current or most recent trend is decreasing or if a flat economy exists. Upturns and downturns in the economy occur in cycles that, over a 20 or 30-year time span, tend to counteract each other. That is why annualized growth rates are important indicators for long term demographic projections.

If a conservative approach is taken and selected control totals are too low then the risk is to be behind in planning for needed infrastructure. If the control totals are too optimistic, this could result in a false or premature justification for roadway and/or transit infrastructure improvements.

The population control totals for Bexar County, in five-year increments to year 2035, are from the Texas Water Development Board. The control totals for Bexar County were approved by the MPO Transportation Policy Board in February 2007. The population control totals for the other counties in the MPO study area (Comal, Guadalupe and Kendall counties) were from the Texas State Data Center. These population forecasts were approved by the Alamo Area Council of Governments' Area Judges Committee in April 2007.

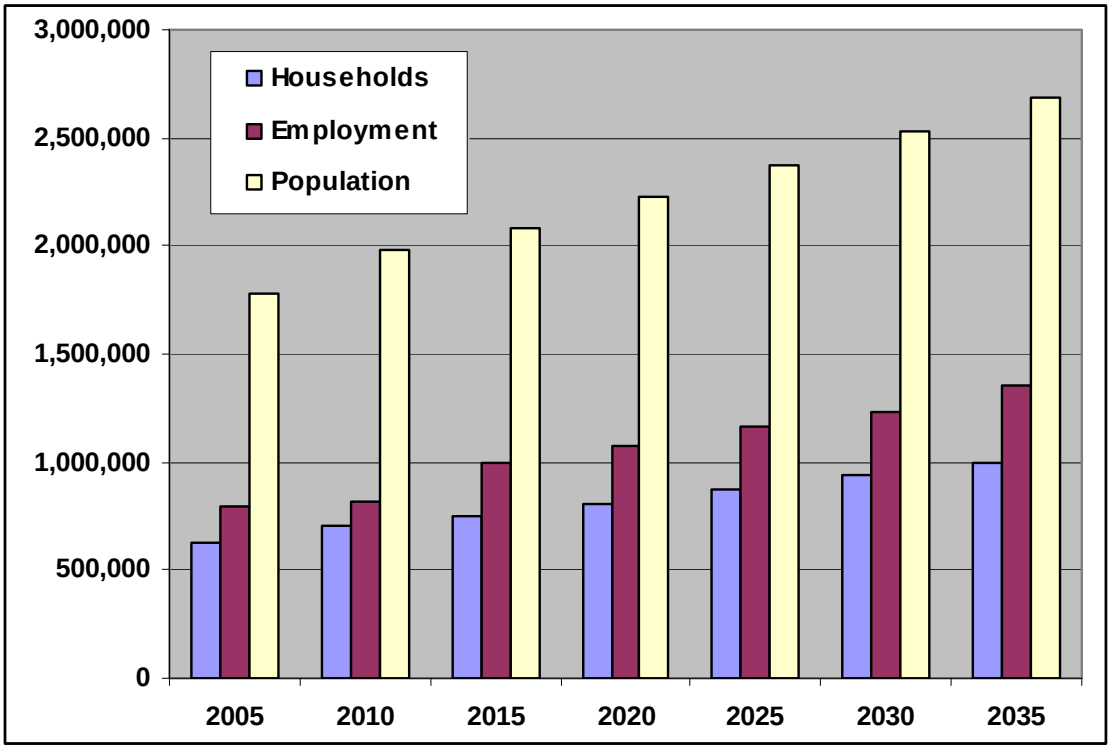
A primary source of base year employment information was the Texas Workforce Commission's (TWC) files (3rd Quarter 2005). The information was geo-coded based on the addresses provided. Where street addresses were not available, telephone books, business listings, and telephone surveys were made to collect information from those employers' locations. The forecasted employment control totals, in five-year increments to year 2035, are derived from Dr. Ray Perryman's (a respected authority on the Texas economy) forecast. The employment forecast totals for Bexar County were approved by the MPO Transportation Policy Board in February 2007. The employment forecast for Comal, Guadalupe and Kendall counties was approved by the Alamo Area Council of Governments Area Judges Committee in April 2007.

The adopted population and employment control totals for the MPO study area are shown in Table 3 and are graphically represented in Figure 3.

Table 3. Population, Households and Employment Control Totals for the MPO Study Area (in millions)

	2005	2010	2015	2020	2025	2030	2035
Population (in millions)	1.78	1.93	2.08	2.23	2.37	2.53	2.69
Households (in millions)	0.63	0.69	0.75	0.81	0.87	0.94	1.00
Employment (in millions)	0.80	0.90	1.00	1.08	1.16	1.26	1.35

Figure 3. Population, Households and Employment Control Totals for the MPO Study Area



While area-wide demographic control totals were readily available, these figures needed to be disaggregated to census tracts and eventually to the traffic analysis zone level for use in the travel demand model. It should be noted that while the allocation model used for the disaggregation process will produce an estimate of what may happen in the future, there is no way to predict the occurrence of unforeseeable changes that would

affect the future distribution of employment and population. This, in part, necessitates that the forecast be reviewed and updated on a regular interval.

The demographic forecasting output at the transportation analysis zone level for each future year increment is the result of a joint effort by the transportation planning agencies in the study area. Concurrence by these agencies on future demographics is necessary before work commences on a subsequent model run. Concurrence ensures minimizing duplication of effort in data development and maximizes local confidence in demographic forecasts. The MPO's partner agencies that comprise the Demographic Working Group include the Alamo Area Council of Governments, Bexar County, City of San Antonio, CPS Energy, San Antonio Water System, Texas Department of Transportation, and VIA Metropolitan Transit.

METROPILUS

The software package METROPILUS was used for the update of "Mobility 2035." The model provides a reasonable and disaggregated data for future years. METROPILUS is an evolution of the DRAM (Disaggregated Residential Allocation Model) and EMPAL (Employment Allocation Model) package and combines employment, residence location, transportation networks, and land consumption in a single comprehensive package embedded in a Geographic Information Systems (GIS) environment.

The overall concept of the METROPILUS forecasting process can be stated simply: the model allocates the total growth in employment, households, and land use for an area into its sub-regional component zones. This allocation is made possible by using regional trends, transportation facility descriptions, and data on current location of employment and households. The required data for the METROPILUS model runs include current census of population and employment by place of work, total future population and employment, travel times between zones and current land use information. The forecasts are done in five-year increments with one forecast becoming input to the next five-year forecast.

Future Land Use

Background

Scenario Planning was initiated to engage residents and policy makers in a discussion of the region's future growth and development patterns. Scenario planning enhances the traditional transportation planning process by raising awareness of citizens and decision makers of the factors that affect growth and impact our transportation system. Factors include an aging population, land use policies, economics, and environmental concerns. In scenario planning, citizens and policy makers are asked to consider alternative approaches, or "land use scenarios" to shape the region and understand the differences between each approach. The ultimate goal is to create a sustained quality of life for citizens and visitors in our region.

The Federal Highway Administration (FHWA) actively encourages and supports scenario planning. FHWA believes that scenario planning can help citizens, businesses, and government officials understand the impacts of growth, especially the relationship between transportation and the social, environmental and economic development of regions. This relationship is a two-way street: growth and development affect transportation performance, while transportation affects social, environmental, and economic development.

FHWA sees scenario planning as an enhancement of, not a replacement for, the traditional transportation planning process. It enables communities and transportation agencies to better prepare for the future. Scenario planning highlights the major forces that may shape the future and identifies how the various forces might interact, rather than attempting to predict one specific outlook. As a result, regional decision makers are prepared to recognize various forces to make more informed decisions in the present and be better able to adjust and strategize to meet tomorrow's needs. Rather than picking one definitive picture of the future and planning for that future, scenario planning allows a region to consider various possibilities and identify policies that can adapt to changing circumstances. Land use scenarios do not describe a forecasted end but are stories about future conditions that convey a range of possible outcomes. The scenario planning process can help people understand the forces of change and the choices they have.

Land Use Scenario Development Process

The Demographic Working Group began the task of developing the initial framework for the development of land use scenarios. Generally, the group considered quality of life issues facing the region and expressed those issues in terms of questions:

- How far do people want to live from work, school or recreation activities?
- Are people willing to consider other transportation alternatives to travel in their daily life?
- How long are people willing to spend on a daily work commute?

The group also considered:

- the amount of expected growth in the region based on the adopted population and employment control totals;
- development trends over time;
- congestion levels;
- local, regional and world economy;
- expected gas prices;
- air quality, climate change and other environmental concerns;
- future availability of transportation funding, and
- technological improvements.

In generating the land use scenarios, the Demographic Working Group considered what was achievable and in what timeframe. Plus the scenarios had to differ significantly

from traditional growth patterns in order to realize impacts to the transportation system using the available tools. Three land use scenarios were considered: Each growth pattern is distinct and represents clear choices. All growth scenarios have the same population growth, job growth, and new households. Differences in the scenarios are shown in where and how the land use in our region occurs. The three growth scenarios evaluated were:

- *Current Growth Trends* – the majority of new growth continues outside of Loop 1604.

- *Transit Oriented Development* – beyond year 2015, several high-capacity transit corridors are defined within Bexar County and the majority of new, higher density growth is attracted to station locations in these corridors.

- *Infill Development* – by year 2020, new policies and incentives result in all new growth within Bexar County occurring inside Loop 1604.

Although the transit oriented development and infill development scenarios differ from traditional growth patterns, these alternative scenarios represent different urban forms, which can be useful in evaluating more efficient roadway and transit systems. Several significant issues affecting regional travel include rising fuel prices, longer commutes, worsening traffic congestion, more trucking and reduced transportation funding. Also there is an increased awareness of alternative fuels, the environment and policies that support a sustainable economy. The TOD/Infill demographic scenario provides for a vision that better optimizes the transportation system.

The next step of the process tested the public's acceptance of and the credibility of potentially implementing transit oriented development or infill development as a formal growth pattern.

The MPO held a series of public meetings in February and March 2009 and asked the community "How would you like to grow?" The public meetings were designed to gather input on which land use growth scenario would best meet the community's future needs. Participants preferred aspects of both Transit Oriented Development and Infill development as growth patterns for the region, and overwhelmingly decided that the future growth for the region should include a combination of the two types of development. Based on recorded public feedback some dominant themes emerged regarding future growth and development for the region:

- Need to work with other agencies to bring about desired growth scenarios
- Need to address other infrastructure and social issues at the same time as addressing transportation
- Need to focus on non-auto options such as bike, pedestrian and transit
- Need more opportunity for public dialogue, public education and input to policy makers
- Need to address environmental concerns, especially aquifer protection
- Need to address circulation issues downtown

Following the workshops the MPO analyzed the responses from the public and presented the results to the Transportation Policy Board. In addition, the concepts, policies and standards that might require change were assessed.

A combination of the two scenarios would include policies and standards that:

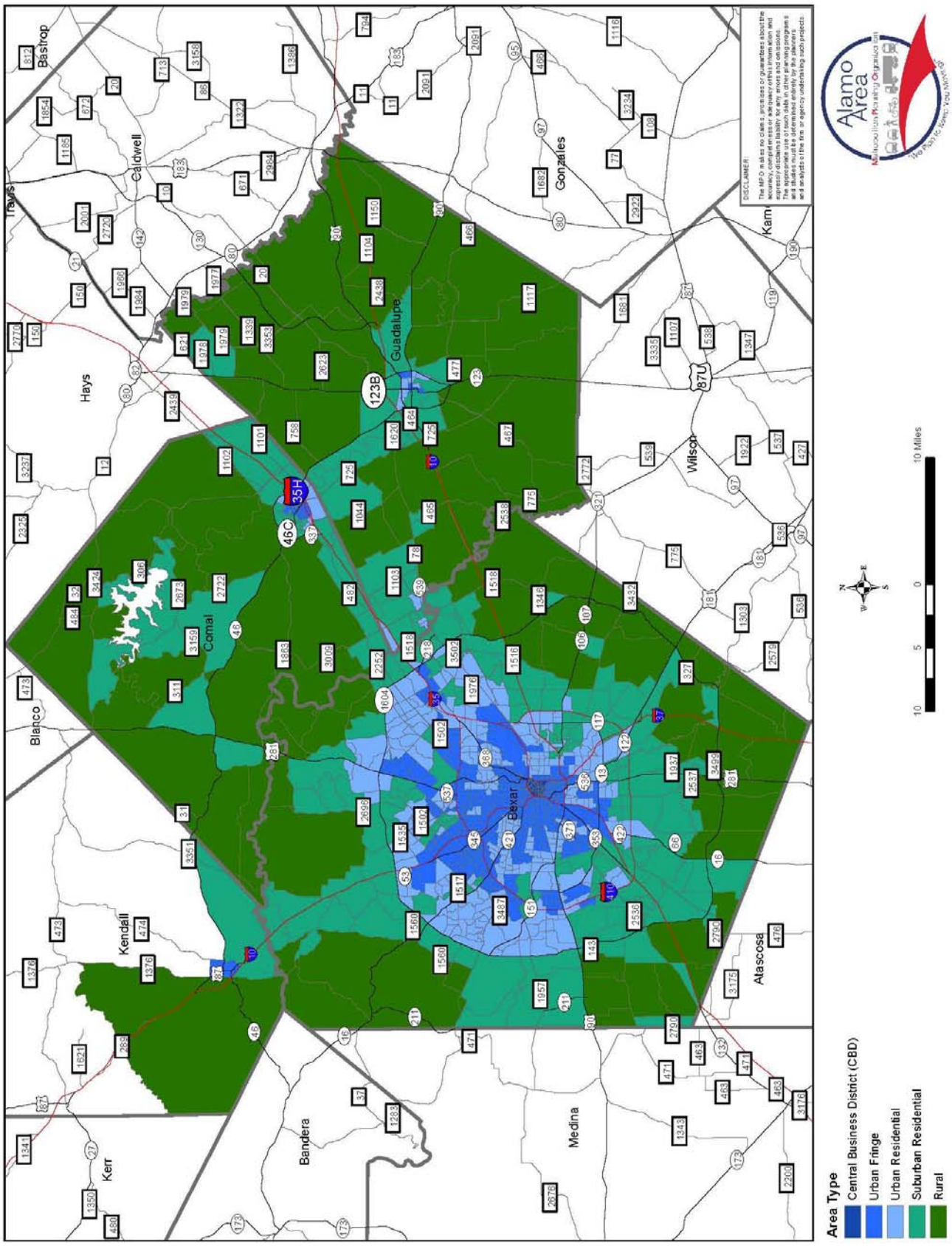
- Promote physical integration of development, either vertically or horizontally
- Achieve appropriate levels of density
- Allow people to move between destinations easily, and rely much less on their vehicles
- Provide multi-modal transportation options
- Provide adequate parking without creating an oversupply
- Promote activity at different times of the day and week, balancing transit ridership and allowing for shared parking
- Promote street width that slows traffic and is pedestrian friendly (24-36 ft.)
- Improve sidewalk standards, benches, trees and lighting
- Primary streets should include dedicated spaces for transit vehicles, cyclists and pedestrians
- Use access management techniques to increase safety and make the street more accessible for all modes of transportation
- Offer rear access for service trucks

Adoption of Land Use Scenario

In March 2009, the MPO's Transportation Policy Board adopted a combined Transit Oriented Development/Infill Development land use scenario for use in the 2035 MTP update, with the knowledge that concepts from both scenarios are centered around compact and mixed use development, connectivity, accessibility and walkability. The adopted scenario assumes, within Bexar County, no new growth would likely occur outside of Loop 1604 after year 2020 but the extensive population and employment that currently exists and is expected to increase through 2020 would continue to impact the current and planned transportation system. This includes all of the proposed toll/managed lane facilities, which fall within existing roadway alignments that will be developmentally built out (US 281, Loop 1604, IH 35, IH 10). The toll/managed lane projects in these travel corridors are expected to relieve forecast traffic congestion while the impact on adjacent land use is expected to be minimal.

Since the selected demographic scenario for Bexar County, a combination of transit oriented development and infill development, was a departure from the traditional growth pattern, it is essential to monitor partner agencies' efforts towards successfully implementing this selected growth pattern as well as potentially reassess the growth scenario in the next update of the long range transportation plan. The map in Figure 4 shows the varying densities of population and employment in year 2035.

Figure 4. Map of the 2035 Adopted Growth Scenario



Environmental Considerations

Environmental Mitigation Analysis

When considering any transportation project, whether tolled or not, the MPO must take into account potential impacts to the environment and community and consider environmental mitigation activities. The following environmental concerns are defined in Table 4.

- Water Quality
- Floodplains
- Wildlife Habitat
- Agriculture
- Edwards Aquifer
- Environmental Justice
- Threatened and Endangered Wildlife (state/federal)

For a broad based environmental evaluation, the MPO primarily used the Geographic Information System Screening Tool (GIS-ST). The GIS-ST is a GIS-driven environmental assessment and data management tool for environmental streamlining. GIS-ST uses ArcGIS to identify and map environmental concerns and to screen potential projects. A sample GIS-ST map depicting % Wildlife Habitat can be found in Figure 5. The MPO reviewed each project in the funded MTP project list to determine the impact of these environmental concerns to each of the projects on the list. The list of managed lane and toll projects in the MTP that includes the above listed environmental concerns can be found in Table 5. The NEPA documentation for each specific toll and/or managed lane project will specifically address the needs in each corridor. Air Quality may be a regional concern and not specifically limited to individual travel corridors.

Figure 5. Sample GIS-ST Map: % Wildlife Habitat

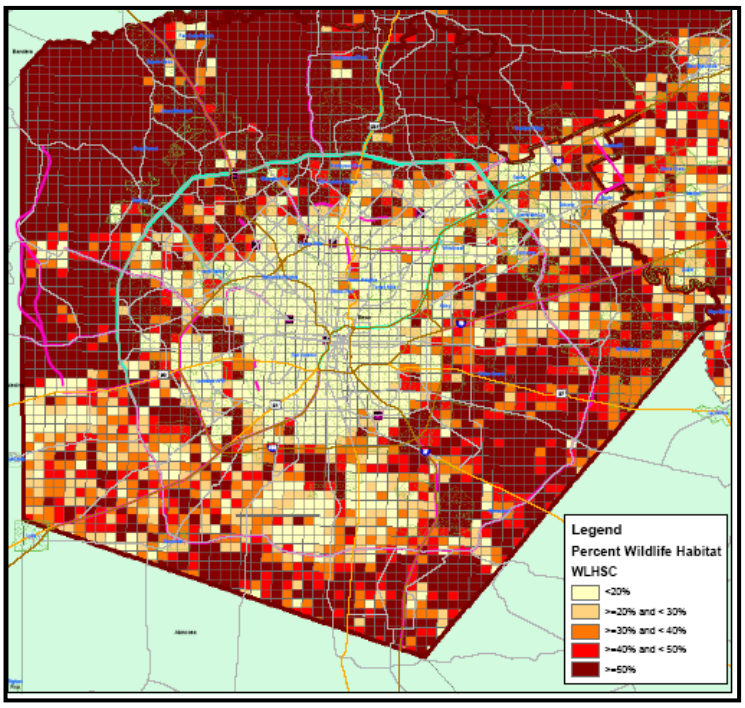


Table 4. Potential Environmental Mitigation Strategies

Criteria Group	Source	Description	Potential Strategies
Water Quality	GIS-ST	Ecologically Significant Stream Segments, Percent Wetlands, Total Maximum Daily Load (TMDL)	Avoid rivers, creeks and other waterways to protect water quality as well as reviewing areas where wetland/stream restoration, enhancement or creation will occur.
Floodplain	GIS-ST	Percent Floodplains	Avoid or minimize adverse effects to ecological areas. Establish and use a regional approach to land preservation if direct preservation of a specific resource is not reasonably feasible. Avoid and minimize adverse impacts through project alignment and design.
Wildlife Habitat	GIS-ST	Percent Wildlife Habitat	Avoid or minimize adverse effects to ecological areas through the preservation of wildlife habitats. Establish and use a regional approach to land preservation if direct preservation of a specific resource is not reasonably feasible. Avoid and minimize adverse impacts through project alignment and design.
Agriculture Land	GIS-ST	Percent Agriculture Land	Avoid or minimize adverse effects to ecological areas through the preservation of agriculture land and open space. Establish and use a regional approach to land preservation if direct preservation of a specific resource is not reasonably feasible. Avoid and minimize adverse impacts through project alignment and design.
Edwards Aquifer	GIS-ST/ Edwards Aquifer Authority	Edwards Aquifer Recharge Zone and Recharge/ Transition Zone Boundary/Contributing Zone/Contributing Zone within Transition Zone	Avoid or minimize impacts to the aquifer through the use of the Edwards Aquifer Rules. Implement mitigation measures through design, the use of native landscaping, minimizing pesticides and fertilizers and the use of permeable surfaces to reduce impacts on ground water recharge.
Environmental Justice	U.S. Census/MPO	Areas identified as environmental justice through the 2000 census tracts expanded to the Transportation Analysis Zone level (TAZ)	Avoid or minimize adverse effects through project alignment and design. Implement other transportation projects or programs that correct or minimize the adverse impacts.
Threatened and Endangered Wildlife	GIS-ST	State Threatened and Endangered Wildlife and Federal Threatened and Endangered Wildlife	Avoid or minimize adverse effects to ecological area through the preservation of threatened and endangered wildlife. Establish and use a regional approach to land preservations if direct preservation of a specific resource is not reasonably feasible. Avoid and minimize adverse impacts through project alignment and design.
Air Quality		Violation of the NAAQS	Air Quality conformity is a regional concern. Conformity does not currently apply as the projects are within an attainment area.

Table 5. Metropolitan Transportation Plan - "Mobility 2035": Toll and Managed Lane Project Listing with Environmental Considerations

Name / MPO Number / CSJ / Programmed Fiscal Year	Limits From: / To: / Project Description / Environmental Considerations		
IH 10 West 3774.0 72 7 41 FY 2016	**FM 3351**	**1.4 Mi S of Leon Springs**	**Project Cost:** $30,000,000
	Expand from 4 to 6 lane expressway (construct 2 new managed lanes)		
	Edwards Aquifer, Environmental Justice, Floodplain, Wildlife Habitat,		
IH 10 West 3007.0 72 8 89 FY 2016	**1.40 Mi S of Leon Springs**	**Loop 1604**	**Project Cost:** $40,000,000
	Expand from 4 to 6 lane expressway (construct 2 new managedlanes)		
	Agriculture, Edwards Aquifer, Environmental Justice, Floodplain, Threatened & Endangered Wildlife, Wildlife Habitat		
IH 35 4014.0 16 5 111 FY 2020	**Guadalupe/Comal County Line**	**FM 1103**	**Project Cost:** $138,000,000
	exp from 6 lane to 10 lane expy (add 4 new managed lanes); Env study req; project is subject to change		
	Agriculture, Wildlife Habitat		
IH 35 4013.0 16 6 47 FY 2020	**Bexar/Guadalupe County Line**	**Guadalupe/Comal County Line**	**Project Cost:** $295,500,000
	exp from 8 lane to 12 lane expy thru FM 3009; then 6 to 10 lane expy from FM 3009 to Comal CL (add 4 new managed lanes); Env study req; project is subject to change		
	Agriculture, Floodplain, Water Quality, Wildlife Habitat		
IH 35 North 3477.0 16 7 113 FY 2020	**IH 410 N**	**Guadalupe/Bexar County Line**	**Project Cost:** $1,018,355,254
	Exp from 8 to 12 lane expy (add 4 new managed lanes) incl managed lane conns at Loop 1604; Env study req; project is subject to change		
	Agriculture, Environmental Justice, Floodplain, Water Quality, Wildlife Habitat		
IH 35 North 61.2 17 10 168 FY 2020	**IH 410 S**	**IH 410 N**	**Project Cost:** $688,144,172
	Exp 8 to 12 lane (add 4 new managed lanes) incl managed lane conns at IH 410 N & IH 410 S; Env study req; project is subject to change		
	Wildlife Habitat, Environmental Justice		
IH 35 North 3514.0 17 10 180 FY 2020	**US 281/IH 37, East**	**IH 410 S**	**Project Cost:** $335,546,368
	Expand from 6 lane to 10 lane expy (add 4 new managed lanes); Env study req; project is subject to change		
	Environmental Justice, Floodplain, Threatened & Endangered Wildlife, Water Quality, Wildlife Habitat		
Loop 1604 2020.0 2452 1 29 FY 2030	**US 90**	**West Military Dr.**	**Project Cost:** $185,609,706
	Expand to 6 lane expressway (construct 2 new managed lanes) including managed lane direct connectors at US 90		
	Agriculture, Environmental Justice, Floodplain, Wildlife Habitat		

Table 5. Metropolitan Transportation Plan - "Mobility 2035": Toll and Managed Lane Project Listing with Environmental Considerations

Name / MPO Number / CSJ / Programmed Fiscal Year	Limits From: / To: / Project Description / Environmental Considerations		
Loop 1604 3911.0 2452 1 52 FY 2030	**West Military Dr.** Expand to 6 lane expressway (construct 2 new managed lanes) including managed lane direct connectors at SH 151 ***Agriculture, Environmental Justice, Floodplain, Wildlife Habitat***	**Braun Road**	**Project Cost:** $55,100,000
Loop 1604 3912.0 2452 1 53 FY 2030	**Braun Road** Expand to 8 lane expy (construct 4 new managed lanes) ***Environmental Justice, Wildlife Habitat***	**SH 16**	**Project Cost:** $62,586,543
Loop 1604 3913.0 2452 2 83 FY 2020	**SH 16** Expand to 8 lane expressway (construct 4 new managed lanes) including managed lane direct connectors at IH 10 ***Edwards Aquifer, Environmental Justice, Floodplain, Wildlife Habitat***	**FM 1535 (N.W. Military Highway)**	**Project Cost:** $308,784,186
Loop 1604 5125.0 2452 2 900 FY 2016	**at IH 10 West** Construct managed lane direct connectors ***Edwards Aquifer, Environmental Justice, Floodplain, Water Quality, Wildlife Habitat,***	**-**	**Project Cost:** $0
Loop 1604 3914.0 2452 2 940 FY 2020	**FM 1535 (N.W. Military Hwy)** Expand to 8 lane expy (4 non-toll & 4 managed lanes) ***Edwards Aquifer, Environmental Justice, Floodplain, Water Quality, Wildlife Habitat***	**Redland Road**	**Project Cost:** $207,240,170
Loop 1604 2021.0 2452 3 81 FY 2030	**IH 35 North** Expand to 4 lanes expressway (construct 4 new managedlanes) including managed lane direct connectors at IH 35 N and IH 10 E ***Agriculture, Environmental Justice, Floodplain, Wildlife Habitat***	**IH 10 (East)**	**Project Cost:** $495,062,599
Loop 1604 3530.0 2452 3 87 FY 2030	**Redland Road** Expand to 8 lane expressway (construct 4 new managed lanes) includng namaged lane direct connectors at IH 35 ***Agriculture, Environmental Justice, Floodplain, Wildlife Habitat***	**IH 35 North**	**Project Cost:** $299,302,713
Loop 1604 3786.0 2452 3 945 FY 2020	**US 281** Expand to 8 lane expressway (construct 4 new managed lanes) ***Edwards Aquifer, Floodplain, Wildlife Habitat***	**Redland Road**	**Project Cost:** $92,127,257

Table 5. Metropolitan Transportation Plan - "Mobility 2035": Toll and Managed Lane Project Listing with Environmental Considerations

Name MPO Number CSJ Programmed Fiscal Year	Limits From: Project Description ***Environmental Considerations***	To:		
US 281 3781.0 253 4 138 FY 2015	**Stone Oak Parkway** Expand to 4 lane expressway (construct 4 new managed lanes) ***Edwards Aquifer, Environmental Justice, Floodplain, Water Quality, Wildlife Habitat,***	**Bexar/Comal County Line**	**Project Cost:**	$351,513,685
US 281 4010.0 253 4 146 FY 2015	**Loop 1604** Expand to 6 lane expressway (4 non-toll lanes & 2 managed lanes) & non-toll northern interchange connectors at Loop 1604 ***Edwards Aquifer, Environmental Justice, Floodplain, Water Quality, Wildlife Habitat,***	**Stone Oak Parkway**	**Project Cost:**	$170,000,000
US 281 5126.0 253 4 902 FY 2030	**Stone Oak Parkway** Expand to 6 lane expressway (construct 2 additional managed lanes) ***Edwards Aquifer, Environmental Justice, Floodplain, Water Quality, Wildlife Habitat,***	**Bexar/Comal County Line**	**Project Cost:**	$63,500,000

Air Quality

The Environmental Protection Agency (EPA) under the Federal Clean Air Act (CAA) created National Ambient Air Quality Standards (NAAQS) to focus on the health threat of certain pollutants, mainly located in major metropolitan areas. If there is a determined health threat, or too much of one pollutant in a determined statistical area, that region becomes non – compliant and is designated as "non-attainment" by the EPA.

Currently, the greater San Antonio area is in attainment of all NAAQS. However, if a stricter standard is adopted at some point in the future, the region may become non-attainment for ground level ozone.

If and when non-attainment occurs in the San Antonio region, the MPO and partner agencies are prepared to conduct a transportation conformity analysis on the region's Metropolitan Transportation Plan and Transportation Improvement Program in order to ensure projects are not exacerbating the air quality problems for the region. Plans and strategies to improve air quality will also be developed. The EPA's air quality conformity regulations ensure that metropolitan transportation systems, transportation projects, and federal projects do not cause new air quality violations, exacerbate existing ones, or delay attainment of the standards.

Water Quality

Due to the development and expansion in the recharge zone of the Edwards Aquifer area and recent weather conditions including drought, concerns regarding the importance of looking after and preserving the water resources in the San Antonio area continues.

As the metropolitan area continues to grow, the needed transportation projects will impact surface water flow and infiltration, especially during storm or flood conditions. Because transportation facilities generally cause an increase in the impermeable surface area, roadways can result in increasing local surface runoff and reducing water infiltration into the soil. Roadway construction projects can also cause the altering of drainage patterns at stream crossings, by changing the speed, direction and amount of storm water flow.

There are several mitigation strategies that could be used to reduce storm water runoff and degradation of the Edwards Aquifer by minimizing the impact of transportation improvements. Most of these can be directly incorporated into the design of the transportation facility. The MPO and partner agencies will work together to ensure there is minimal impact on the Edwards Aquifer. The NEPA documentation for each specific managed lane project will specifically address the impacts in each corridor.

Toll Policy

Development and Adoption of the Toll Policy

On April 12, 2012, the Alamo Regional Mobility Authority (RMA) Board of Directors adopted updated policies and procedures for toll collection operations on the Alamo RMA Turnpike System. The adopted document in its entirety is attached as Appendix A. The adopted policy includes exemptions from toll payment, payment methods, promotions on the use of electronic toll tags, customer service and violation policies, phasing of construction projects and/or toll collection, equal access to the system, toll rates and escalation and more.

Toll Collection System

The San Antonio area Toll System will be a full electronic toll collection system, affording drivers the choice between a standing toll tag account interoperable across Texas, or the use of video tolling (pay by mail) – a photo capture of license plates with a monthly billing statement. The Alamo RMA may expand options for payment by any future action and the availability of technology.

While final prices and distribution methods have not been established at this time, it is expected that the Alamo RMA will make toll tags available to the community through a variety of outlets. Several tag replenishment methods will also be made available to the user. Statewide toll tags will ensure interoperability between toll/managed lane facilities throughout Texas.

A pay-by-mail or video billing option is presumed to be part of this component for those drivers who do not use a toll tag to use the toll facilities. This option will have a premium charge associated with the billing, and using industry averages, this is presumed to be approximately a 33% increase over the posted “Tag Only” rate. Additionally, a processing fee to recover costs of mailing the bill will be included.

All tag and toll materials, including billing, will comply with all relevant executive orders, federal regulations and state law regarding accessibility for language preferences, ADA compliance, and other related impacts.

Initial Adopted Toll Rates and Escalation Methodology

Based on the policy adopted by the Alamo RMA, initial toll rates may be set in the range of $0.17 to $0.50 per mile for toll facility usage, dependent on the final project financial plan as developed and approved by the Alamo RMA Board of Directors. The policy further states the toll rates will be adjusted on an annual basis. For the first ten years of operation the minimum increase each year is to be set at 2.75% or the Consumer Price Index for the immediate preceding year, whichever is greater. Starting in year eleven and for each subsequent year, the minimum increase will be 3% or the Consumer Price Index for the immediate preceding year, whichever is greater. Emergency and state and

federal military vehicles are exempt from paying tolls on the Alamo RMA toll road system.

To facilitate a multi-modal transportation system that ensures safe and efficient travel, public transit vehicles operated by a public agency and having the characteristics of a bus as defined by 541.201 of the Texas Transportation Code will be permitted free usage of any managed lanes in operation by the Alamo RMA. On traditional toll facilities without the managed lane designation, exemptions shall be established on an annual basis between the Alamo RMA and the public agency transit provider based on projected usage within the toll corridor.

Users who are part of a registered carpool that have a declared vehicle with a tag and a funded account will be able to use the managed lane facility under the operation of the Alamo RMA for no charge dependent on the technology available to implement this provision. On traditional toll facilities without the managed lane designation, the tag account will be charged the published rate for a toll tag transaction as determined by the Alamo RMA on an annual basis in accordance with the policy.

It is recognized that toll/managed lanes not operated by the Alamo RMA may be subject to different toll policies and procedures.

Environmental Justice

Background

In 1994, Executive Order No. 12898: Federal Action to Address Environmental Justice (EJ) in Minority Populations and Low-Income Populations was issued. Executive Order 12898 expands on the Title VI Civil Rights Legislation and promotes nondiscrimination in federal programs that substantially affect human health and the environment. In addition, the order provides minority and low-income communities access to public information and opportunity for public participation in related matters. All programs that receive funding from federal agencies require Environmental Justice consideration in accordance with federal law.

More specifically, Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws. “Fair Treatment” includes policies and practices that ensure that no group of people, including racial, ethnic, or socioeconomic groups bear disproportionately high and adverse human health or environmental effects resulting from federal programs, policies, and activities. Environmental Justice seeks to:

- Avoid, minimize or mitigate disproportionally high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.

- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

In addition to the definition above, the United States Department of Transportation (USDOT) issued specific guidelines to MPOs regarding Environmental Justice. MPOs are to:

- Explore needs within minority communities
- Involve minority communities and disabled persons in the transportation planning process
- Include minorities/disabled persons on boards and committees in leadership roles
- Document Title VI efforts
- Advertise public meetings in places where minorities/disabled persons go
- Hold meetings at times and places convenient for the minority community
- Communicate in languages other than English
- Consider special needs in public accommodations
- Follow up with the minority community after public meetings, when decisions are made and after project implementation

For the development of the long range transportation plan, in order to thoroughly engage the public and gather input the MPO hosted a series of public meetings throughout the region. The purpose of the meetings was to identify innovative approaches to solve transportation problems while engaging the community and serving as a catalyst for their interaction with local governments and decision makers.

The public commented on several major transportation issues discussed in the long range transportation plan. One major concern for the region is the potential use of tolled and managed lanes to help manage the projected increase in population by more than 600,000 people by 2035. Tolled and managed lanes are one strategy utilized to fund and maintain future roadway systems and mobility. As the MPO region becomes more diverse and non-traditional transportation projects such as tolls are explored, Environmental Justice issues will continue to be at the forefront of transportation planning efforts.

One of the core principles of Environmental Justice (EJ) analysis is the significant involvement of potentially impacted minority and low-income populations in the decision-making process surrounding transportation projects. The MPO and partner agencies recognize the need for and the clear benefits of Environmental Justice community participation. The proposed toll and managed lane projects in the 2035 long range transportation plan have been evaluated for potential impacts to Environmental Justice communities.

There is the realization that with tolled or managed lane facilities there are potential future and indirect impacts to the region. This analysis considers effects tolled facilities may have on populations in the region, particularly low-income and minority communities as traditionally underserved populations are most sensitive to toll roads or

managed lanes in relation to access. Restricting access due to pricing may have the potential to create an imbalance of adverse effects. This analysis focuses on the benefits and negative impacts to Environmental Justice communities.

Limited English Proficiency

Limited English Proficiency (LEP) can be a barrier to effective community involvement and hinder access to toll/manages lane facilities. The Spanish language is commonly used within the MPO study area. The MPO has adopted an LEP plan which adheres to the USDOT guidelines by promoting the conduct of specific outreach in underserved communities by hosting public meetings in strategic locations, translating information into Spanish, including minorities/disabled persons on committees, advertising public meetings and information in a variety of print media and documenting all efforts.

Definition of Environmental Justice (EJ) Areas

At this stage, without an existing system in operation in the San Antonio region, it is difficult to determine the precise differences between EJ and Non EJ populations in regards to their usage of this toll system. As discussed in prior sections, the toll system will include annualized free service for VIA Metropolitan Transit, and will continue to maintain non-toll capacity within the same corridors, with new toll lanes being added to the corridor. No degradation of service is anticipated for non-toll users.

Table 6 shows the year 2000 census population for the counties within the current MPO study area.

Table 6. Population (2000 Census) Totals for the Expanded MPO Study Area

County	Total Population	Non- Hispanic White Pop	Minority Population	Percent Minority Population
Bexar	1,392,931	496,245	896,686	64.4%
Comal	78,021	58,345	19,676	25.2%
Guadalupe	89,023	52,858	36,165	40.6%
Kendall (portion)	14,654	11,985	2,669	18.2%
MPO Study Area	1,574,629	619,433	955,196	60.7%

For the purpose of this analysis, though, the geographic unit used was the Transportation Analysis Zone (TAZ). Using the 2000 U.S. Census SF1 Block Group Data (which contains population ethnicity and household income data), each TAZ was identified as EJ or Non-EJ. Since most TAZ contain multiple Block Groups, minority/non-minority populations and households at or below poverty level were combined for the entire TAZ to determine the percentage of both minority population and poverty households residing within the TAZ. Any TAZ with 50% or more minority population or 50% or more households at or below poverty level (based on the United States Health and Human Services Poverty Guidelines provided in Table 7) were designated as EJ zones. All others were designated as Non-EJ zones.

Table 7. United States Health and Human Services Poverty Guidelines

The 2009 Poverty Guidelines for the 48 Contiguous States and the District of Columbia	
Persons in family	**Poverty guideline**
1	$10,830
2	$14,570
3	$18,310
4	$22,050
5	$25,790
6	$29,530
7	$33,270
8	$37,010
For families with more than 8 persons, add $3,740 for each additional person.	

As shown in Table 8, for the MPO study area, 61.2% of the number of TAZ are currently EJ zones. These current EJ zones translate into 22.4% of the square miles of the MPO study area and they are projected to contain 52.4% of the year 2035 population. For the MPO study area, 38.8% of the TAZ are non-EJ, reflecting 77.6% of the land area, and these 406 zones are projected to contain 47.6% of the year 2035 population.

Table 8. Analysis of Environmental Justice Communities (MPO Study Area)

	2000 Population	% of Total	No. of Current TAZ	% of Total	Square Miles	% of Total	2035 Population	% of Total
Environmental Justice TAZ	961,108	61.0%	641	61.2%	606	22.4%	1,409,788	52.4%
Non-Environmental Justice TAZ	613,521	39.0%	406	38.8%	2,094	77.6%	1,281,415	47.6%
Totals	1,574,629	100.0%	1047	100.0%	2,700	100.0%	2,691,203	100.0%

As shown in Figure 6 the Environmental Justice communities are widespread across most of the MPO study area. VIA Metropolitan Transit's current transit service placed over the EJ zones is shown in Figure 7, their proposed 2035 transit service placed over the current EJ zones is shown in Figure 8 and the tolled/managed lane projects that are expected to be operational by year 2035 placed over the current EJ zones are shown in Figure 9.

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Figure 6. Environmental Justice Zones (Transportation Analysis Zones)

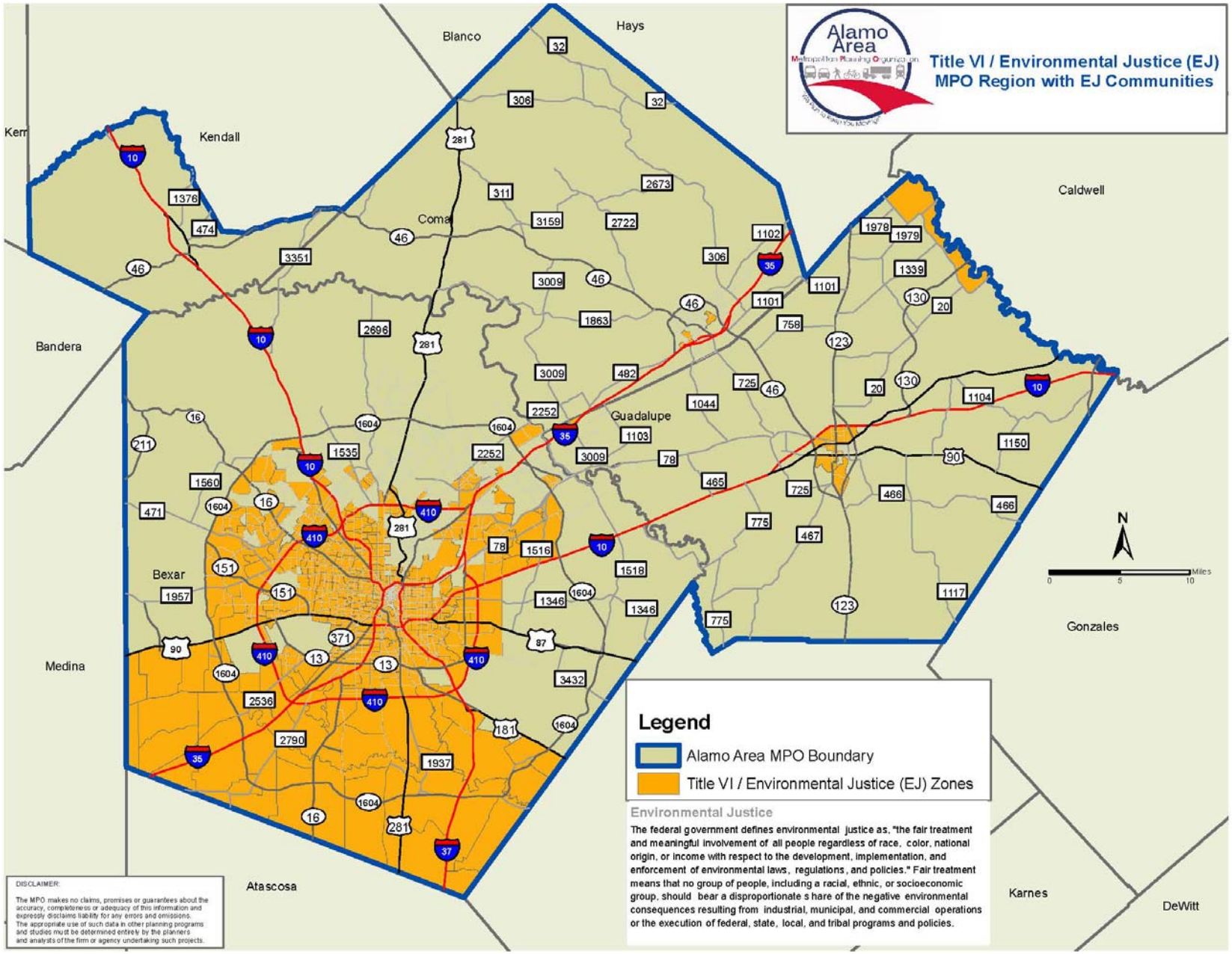


Figure 7. Transit Routes Located in Environmental Justice Zones (2009)

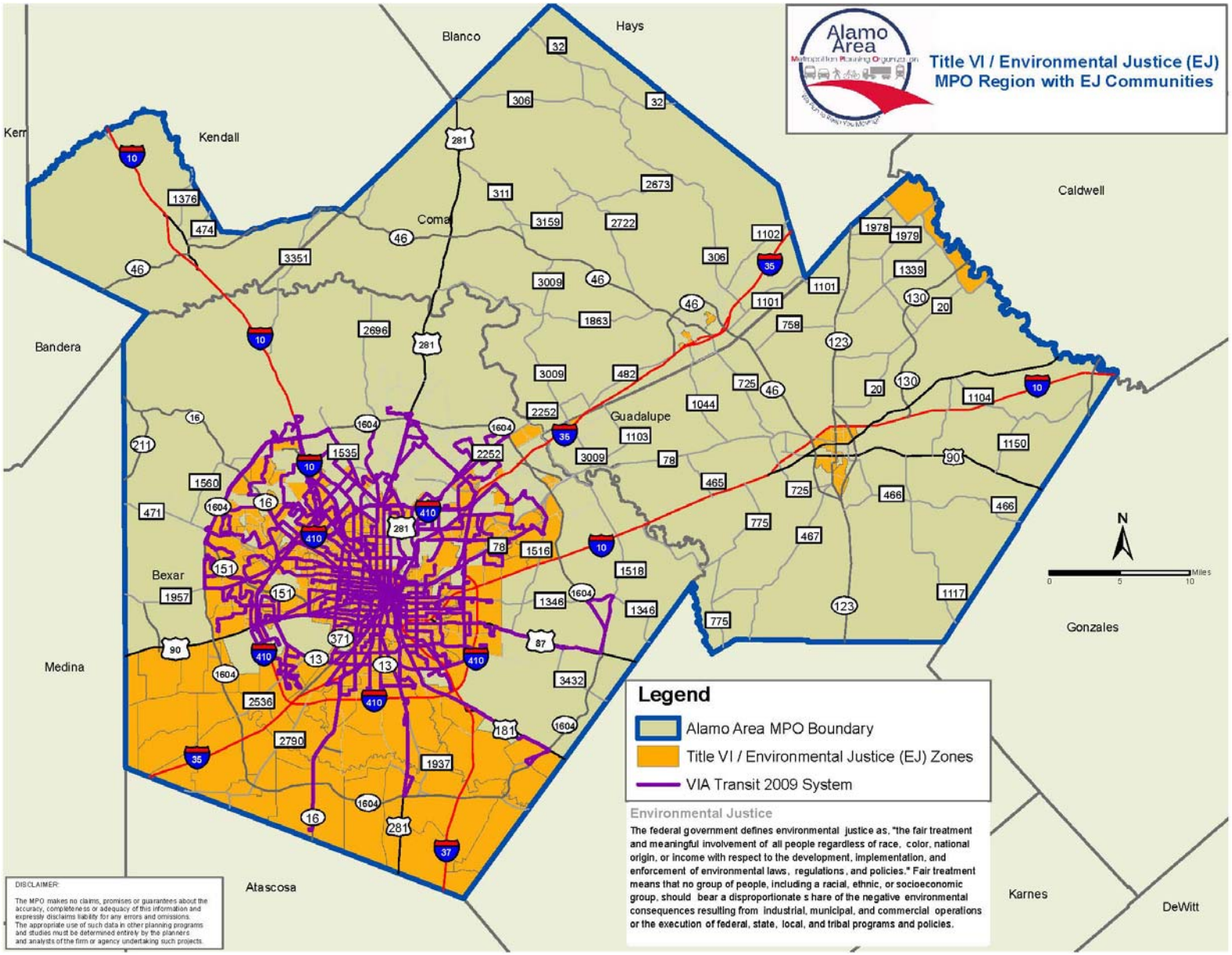


Figure 8. 2035 Transit Network Located in Environmental Justice Zones

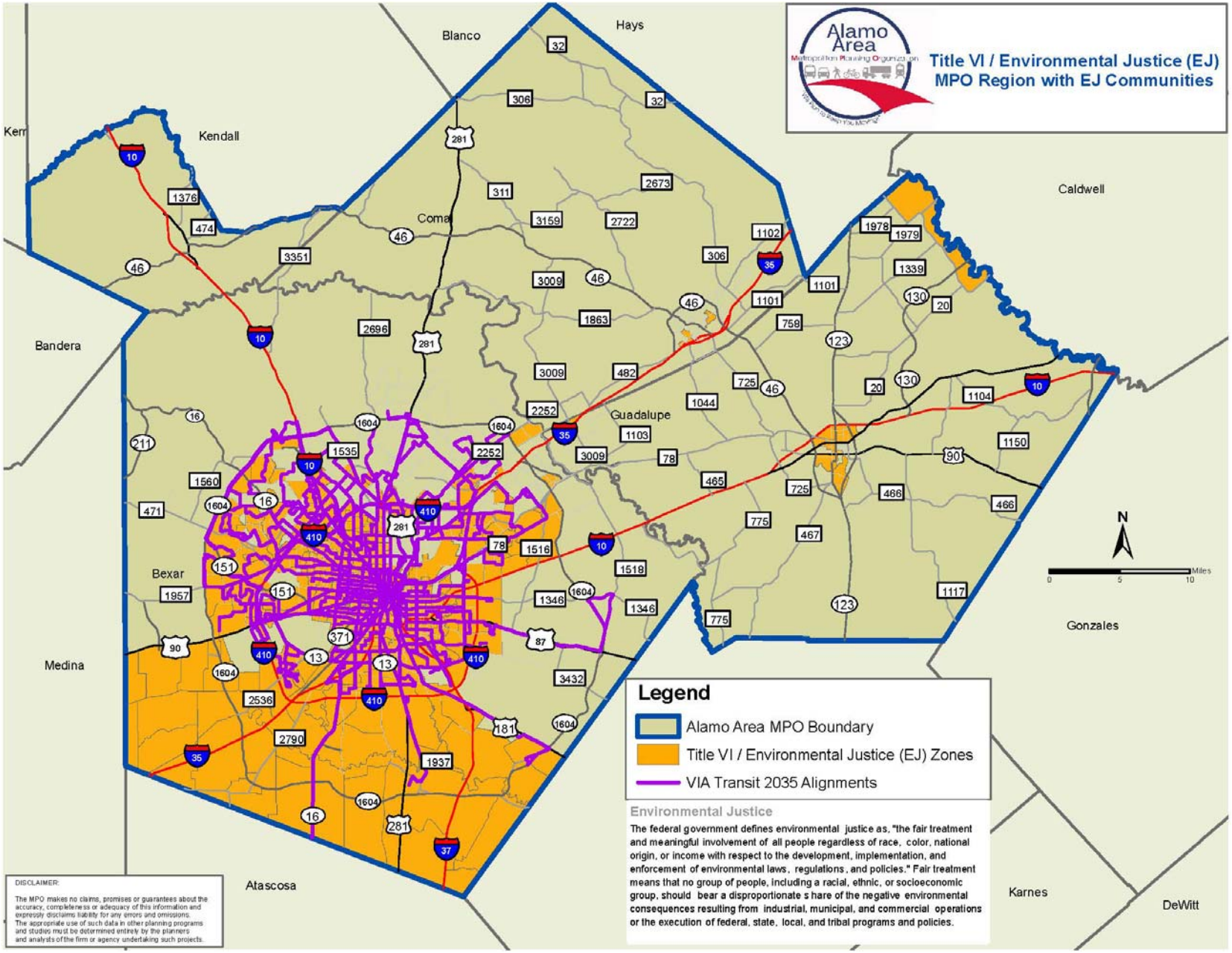
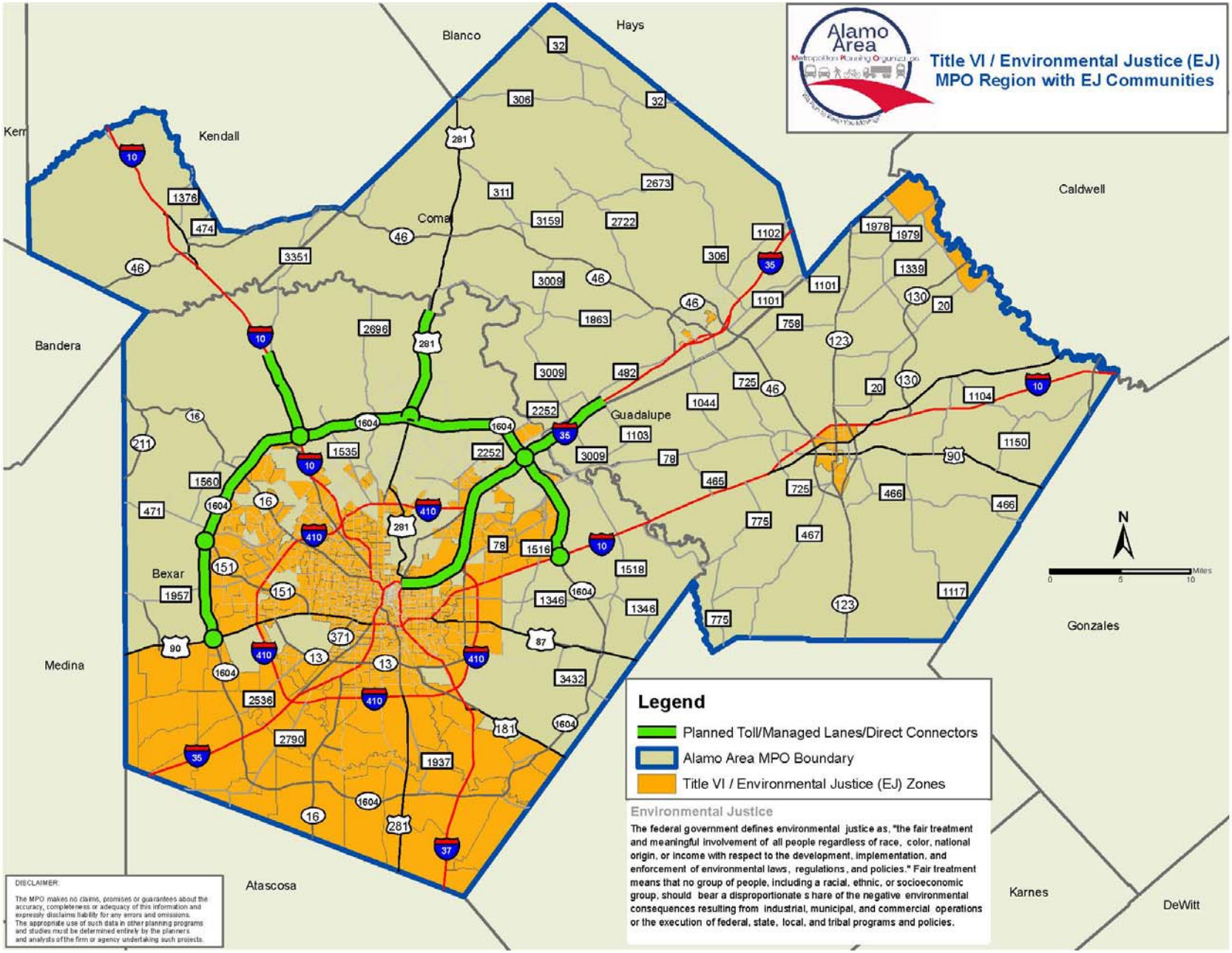


Figure 9. MPO Region's Environmental Justice Communities and Tolled/Managed Lanes



Analysis Methodologies and Results

The analysis examines potential impacts that tolled/managed lane facilities may have on accessibility of all persons by analyzing travel time impacts of people residing in the Environmental Justice zones and Non-Environmental Justice zones. The analysis looked at several different distance and time components of the regional transportation system using both the 2015 and 2035 (with and without toll/managed lane) networks. While the 2015 reflects the ”existing plus committed” network, (projects in the TIP that are open to the traveling public by 2015), the 2035 (with) includes the toll/managed lane projects designated in our long range plan 2035 and the 2035 (without) excludes these projects.

Comparison of 2015 and 2035 Travel Times (Speed)

For this analysis MPO staff identified 34 activity centers geographically distributed throughout the region and shown in Figure 10. The activity centers include central business districts, colleges and universities, major employers, military bases, major medical facilities and regional shopping centers. The travel time analysis, using the loaded network speeds and travel times generated from traffic assignment, compares travel times and speed from each EJ and non-EJ TAZ to each activity center for years 2015 (existing plus committed), 2035 (with full build-out of toll/managed lane system) and 2035 (without toll/managed lane system). This analysis determines that the EJ zones were not detrimentally impacted by the addition of toll/managed lanes. Moreover, the analysis determines that all travelers, whether EJ or not, benefit from the addition of toll/managed lanes. This is because any traveler, who elects to save time by paying for and using the managed lane, moves out of the general purpose lane and thereby creates additional capacity on the “free” alternative… so all travelers benefit. As shown in Table 9, the travel time savings and improved speeds vary for both EJ and Non-EJ zones based upon where they live and to which activity center they are destined, but there are no trips to activity centers where the travel times and speeds are degraded from the inclusion of toll/managed lane projects.

The results from the travel time and speed analysis performed on the 34 activity centers are shown in Table 9. Interestingly, a greater proportion of the activity centers are located within or near EJ TAZ. This generally results in shorter home based trips for travelers from EJ zones than for Non-EJ zones. As shown in the table, the average 2015 distance, travel time and speed to activity centers is 9.4 miles in 19.9 minutes @ 29 mph for EJ vs. 14.0 miles in 26.5 minutes @ 31 mph for Non-EJ. These are significant differences, which would likely indicate that EJ travelers would be less likely to use freeways or toll/managed lane facilities, if available for the trip. Longer trips are typically required to generate enough time savings to justify paying a toll.

Table 9 also indicates an overall degradation of travel times and speeds from 2015 to 2035 for both sets of travelers. For example, the average EJ travel time increases from 19.9 minutes @ 29 mph to 25.9 minutes @ 21 mph (with the toll/managed lanes) and to 31.5 minutes @ 18 mph (without the toll/managed lanes) by 2035. For Non-EJ, the

average travel time increases from 26.5 minutes @ 31 mph to 39.0 minutes @ 21 mph (with the toll/managed lanes) and to 50.9 minutes @ 16 mph (without the toll/managed lanes) by 2035. So the inclusion of the 2035 toll/managed lane option would provide for an average travel time savings of 5.6 minutes for EJ and 11.9 minutes for Non-EJ travel to the activity centers by 2035.

The overall results indicate travel time savings for both EJ and Non-EJ travelers and certainly don't show any disproportionate adverse impact upon either set of travelers.

Figure 10. Selected Activity Centers for the Travel Time Analysis

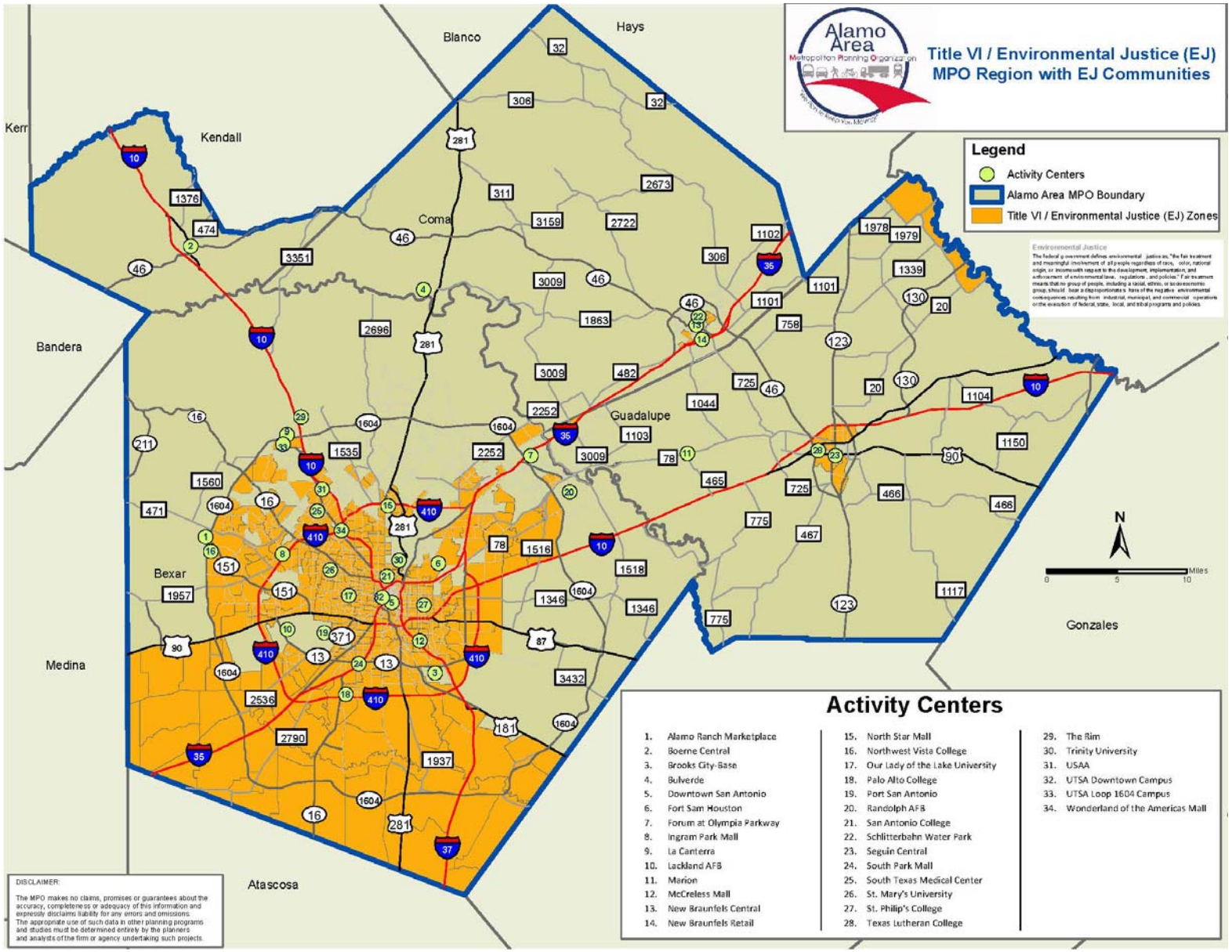


Table 9. Comparison of 2015 and 2035 Travel Characteristics for EJ and Non EJ Zones
2035 Travel Network includes Toll/Managed Lane Facilities

Activity Center	TAZ	EJ Zones: 2015 Avg Miles	Non-EJ Zones: 2015 Avg Miles	EJ Zones: 2015 Avg Travel Time	Non-EJ Zones: 2015 Avg Travel Time	EJ Zones: 2035 Avg Time W/Toll	Non-EJ Zones: 2035 Avg Time W/Toll	EJ Zones: 2035 Avg Time No Toll	NEJ Zones: 2035 Avg Time No Toll	EJ Zones: 2015 Avg Speed	Non-EJ Zones: 2015 Avg Speed	EJ Zones: 2035 Avg Speed W/Toll	Non-EJ Zones: 2035 Avg Speed W/Toll	EJ Zones: 2035 Avg Speed No Toll	Non-EJ Zones:2035 Avg Speed No Toll
Alamo Ranch Marketplace	730	8.6	4.7	17.4	9.4	26.2	14.1	34.5	21.4	30	30	20	20	15	13
Boerne Central	1233, 1234	24.3	6.2	42.8	12.3	57.6	20.4	71.2	33.7	34	30	25	18	20	11
Brooks City-Base	93	7.2	11.9	14.4	21.4	20.0	30.2	24.2	35.0	30	33	22	24	18	20
Bulverde	996	25.9	7.6	59.5	15.7	71.9	32.3	107.4	56.4	26	29	22	14	14	8
Downtown San Antonio	1-4, 836-859	6.0	13.6	13.5	27.6	17.9	37.1	19.8	43.1	27	30	20	22	18	19
Fort Sam Houston	394	8.2	14.5	22.9	31.2	26.2	41.6	34.5	52.9	21	28	19	21	14	16
Forum at Olympia Parkway	772	10.2	8.3	19.0	16.5	26.9	25.3	32.0	35.4	32	30	23	20	19	14
Ingram Park Mall	684	6.3	11.6	15.3	16.5	21.0	35.0	27.1	44.7	25	42	18	20	14	16
La Canterra	741	8.7	8.3	17.7	16.1	23.0	22.5	27.4	29.8	29	31	23	22	19	17
Lackland AFB	192, 193	6.6	9.1	14.2	18.8	19.6	28.2	23.8	39.5	28	29	20	19	17	14
Marion	921, 922	20.1	8.8	33.8	15.8	54.2	29.4	59.7	38.6	36	33	22	18	20	14
McCreless Mall	74	4.5	11.9	9.3	22.1	12.6	31.5	14.6	36.8	29	32	21	23	19	19
New Braunfels Central	1037, 1042, 1043	10.9	9.2	19.5	21.7	28.5	36.0	32.1	59.1	33	25	23	15	20	9
New Braunfels Retail	1044	9.7	9.4	17.1	21.4	24.9	36.0	28.1	59.1	34	26	23	16	21	10
North Star Mall	375	7.7	11.6	19.9	27.5	23.0	34.0	27.4	44.6	23	25	20	20	17	16
Northwest Vista College	678	7.5	22.9	14.3	41.5	19.1	54.2	24.5	73.5	32	33	24	25	18	19
Our Lady of the Lake University	233, 230, 232, 231	6.4	23.7	14.2	46.3	19.3	64.8	21.5	79.1	27	31	20	22	18	18
Palo Alto College	157	8.1	30.0	15.6	54.4	21.6	77.0	24.3	92.1	31	33	22	23	20	20
Port San Antonio	835	7.4	14.9	16.3	30.2	22.0	41.3	26.3	49.3	27	30	20	22	17	18
Randolph AFB	777	10.0	10.2	18.9	19.1	28.1	30.9	39.4	44.0	32	32	21	20	15	14
San Antonio College	296, 430	6.9	19.7	15.2	38.1	20.3	58.5	23.1	66.0	27	31	20	20	18	18
Schlitterhahn Water Park	1036	9.1	10.3	17.1	26.2	24.6	42.2	29.5	73.4	32	24	22	15	19	8
Seguin Central	939, 940, 951	3.2	8.1	6.2	16.0	9.4	26.7	11.9	35.1	31	31	20	18	16	14
South Park Mall	429	4.7	34.1	9.8	32.5	13.5	45.3	16.4	52.9	29	63	21	45	17	39
South Texas Medical Center	445, 451, 452, 900-904	6.7	11.1	16.1	23.6	22.2	33.2	26.5	42.0	25	28	18	20	15	16
St. Mary's University	278	6.3	22.7	14.4	46.5	19.6	64.6	21.2	78.7	26	29	19	21	18	17
St. Philip's College	40	5.4	22.2	40.4	40.4	14.9	57.5	21.2	69.8	8	33	22	23	15	19
Texas Lutheran College	941	21.7	18.2	33.2	34.0	50.9	53.7	55.6	67.4	39	32	26	20	23	16
The Rim	748	10.5	7.7	20.1	14.9	26.1	21.7	31.8	27.1	31	31	24	21	20	17
Trinity University	389, 334	8.4	17.5	19.0	34.6	25.2	48.8	29.5	61.2	27	30	20	22	17	17
USAA	495, 450, 451	7.2	9.7	16.7	20.4	22.8	28.1	26.8	35.9	26	28	19	21	16	16
UTSA Downtown Campus (1)	225, 885	4.5	14.3	9.9	28.3	13.4	38.4	14.3	45.2	28	30	20	22	19	19
UTSA Loop 1604 Campus (2)	740, 470	13.9	17.9	28.7	33.3	36.4	46.1	42.6	59.7	29	32	23	23	20	18
Wonderland of the Americas Mall	345	5.7	13.3	13.0	27.5	17.6	37.9	20.1	47.2	26	29	19	21	17	17
Sum		318.4	475.0	675.2	901.7	880.6	1324.5	1070.1	1729.3	970	1066	722	717	604	556
Average		**9.4**	**14.0**	**19.9**	**26.5**	**25.9**	**39.0**	**31.5**	**50.9**	**29**	**31**	**21**	**21**	**18**	**16**

Table 10.

Comparison of EJ and Non EJ Travel to various activity centers for 2035 Toll/Managed Lanes vs. 2035 Non Toll/Managed Lanes

EJ Home Based Trips to Activity Centers	662,873
Average Distance (Miles)	6.73
Total Vehicle Miles of Travel	4,461,135
Average 2035 Travel Time (toll no-build)	15.77
Average Vehicle Hours of Travel	174,225
Average Speed	25.61
Average 2035 Travel Time (with toll)	13.67
Average Vehicle Hours of Travel	151,025
Average Speed	29.54
Total EJ Daily Vehicle Hours of Travel Saved	**23,201**
Non - EJ Home Based Trips to Activity Centers	555,697
Average Distance (Miles)	10.67
Total Vehicle Miles of Travel	5,929,287
Average 2035 Travel Time (toll no-build)	22.79
Average Vehicle Hours of Travel	211,072
Average Speed	28.09
Average 2035 Travel Time (with toll)	18.87
Average Vehicle Hours of Travel	174,767
Average Speed	33.93
Total NEJ Daily Vehicle Hours of Travel Saved	**36,306**

Comparison of 2035 Travel Times with Toll/Managed Lane Facilities and Without Toll/Managed Lane Facilities

Table 10 continues this analysis by comparing the overall VMT and VHT for the combined home based EJ travel to activity centers (662,873 trips) and the combined home based Non-EJ travel to activity centers (555,697 trips). Although there are more EJ trips, they are typically shorter and generate less overall VMT (4,461,135) than the Non-EJ travel (5,929,287). However, both sets of travelers are shown to benefit from overall savings in daily VHT.

The results of the analysis suggest that environmental justice populations do benefit from the toll/managed lane facilities. Other improvements such as VIA's modern streetcar system are proposed to serve the urban core thereby improving mobility for ~~the~~ some environmental justice populations. As stated previously, mitigation measures for the environmental justice communities, with respect to the regional toll system, include the availability of free travel lanes within the alignment of each of the proposed toll/managed lane facilities.

As currently proposed, the San Antonio toll/managed lane system will include and incorporate non-toll capacity within the same corridor as toll capacity. ~~in accordance with Texas state law.~~ No corridor in which non-toll traffic exists today will be converted to a toll-only traffic scenario in the future.

Under this approach, EJ communities will see a benefit from the proposed improvements as congestion would decrease on non-toll facilities based on drivers choosing to use the toll facility. Having tolled/managed lane facilities results in travel time savings to those who choose to use the tolled/managed lane facilities and travel time savings to the adjacent non-tolled highway facilities.

Cumulative Economic Effect

The economic impact of choosing to travel on toll/managed lane facilities may have a greater impact on low-income individuals and families because the cost may be of greater proportion of their income than median or high income users. However, strategies to minimize possible negative effects of tolling on low-income persons include waiving tolls for transit vehicles on managed lanes and maintaining the non-toll capacity in the same corridor as currently exits to ensure viable non-toll alternatives. Also, there are no limitations on providing additional travel capacity in parallel travel corridors.

Analysis of the economic impact of paying for the use of toll/managed lanes upon EJ vs. Non-EJ populations.

The financial impact of paying for the use of toll/managed lanes can be estimated by comparing the financial resources (from zonal household incomes) to the estimated yearly costs of tolls (as a percentage of income) for EJ vs. Non-EJ work travel. The first

step (using the regional travel demand model) is to look at the characteristics of the EJ workers and work trips as compared to those of the Non-EJ workers and work trips. Home based work vehicle trips are used for this analysis because the work trip purpose is the most likely to occur in congested travel times and most likely to require specific arrival times and thus most likely to benefit from using the toll/managed lane facilities.

For 2035, as shown in Table 11, EJ zones generate 889,869 (vehicle) work trips, based upon average household income of $29,167 from 514,521 households within the 641 EJ TAZ. Non-EJ zones generate 1,030,427 work trips, based upon average household income of $57,586 from 479,931 households within the 406 Non-EJ TAZ. Lower income households typically have fewer workers in the household (as estimated by the Tripcal5 trip generation model) and therefore generate fewer work trips per household. The 2035 EJ work trips are significantly shorter (9.1 miles) compared to the Non-EJ work trip length (13.0 miles). The shorter EJ work trips are far less likely to use the toll/managed lanes because the likelihood of sufficient travel time savings is diminished and the general location of the proposed toll/managed lanes is not as “handy” to the EJ zones (see Figure 9).

To further estimate possible toll/managed lane usage, both the EJ and Non-EJ work trips were individually assigned to the 2035 (with Toll/managed) network (with the tolls turned off) to establish an upper bound of “eligible” toll trips. Looking at the assigned VMT for specific tolled facility types, the assignments show that for EJ work travel, only about 3.5% (281,834/8,097,808 VMT) or about 31,000 equivalent 9.1 mile work trips would be eligible to use toll/managed facilities. For Non-EJ, about 12.3% (1,642,601/13,395,551 VMT) or about 126,350 equivalent 13.0 mile work trips would be eligible.

Applying the proposed $0.17 per mile toll charges to the toll eligible VMT provides some insight as to the estimated daily toll charges and the financial impact that might be incurred by the EJ and Non-EJ populations. From Table 11, (assuming that every work trip eligible to use a toll/managed lane facility would do so) the EJ toll user would pay an average of $1.55 toll per trip (for the 9.1 mile work trip) or about $387 per year, while the Non-EJ toll user would pay an average of $2.21 toll per trip (for the 13.0 mile work trip) or about $553.per year.

In summary, because the potential EJ user of toll/managed lane facilities would typically be making shorter and fewer toll eligible work trips, the estimated yearly toll costs ($387) would be less than those for Non-EJ ($553) but the financial impact (based upon household income) would be slightly higher. For the EJ toll user the $387 in toll charges represents about 1.3% of the average $29,167 gross yearly income for EJ populations. For the Non-EJ toll user the $553 in toll charges is significantly higher but still only represents about 1.0% of the average $57,586 gross yearly income for NEJ populations.

Table 11. Comparison of EJ and Non EJ Work Travel Estimated Financial Impact of Tolls (2035)

EJ Home Based Work Vehicle Trips	889,869
Average EJ TAZ Income	$29,167
EJ Households (in 641 TAZ)	514,521
Average Work Trip Distance (Miles)	9.10
Total Daily Vehicle Miles of Travel (VMT)	8,097,808
Toll/Managed Lane Eligible VMT	281,834
% Eligible	3.48
Total EJ Daily Toll Cost (at $0.17 per mile)	$47,912
Toll Eligible Equivalent Work Trips	30,971
Daily Toll Cost per Equivalent Work Trip	$1.55
Estimated Yearly Toll Cost (at 250 days)	$387
Toll Expense Proportion of EJ Income	**0.013**
Non - EJ Home Based Work Vehicle Trips (2035)	1,030,427
Average NEJ TAZ Income	$57,586
NEJ Households (in 406 TAZ)	479,931
Average Work Trip Distance (Miles)	13.00
Total Daily Vehicle Miles of Travel (VMT)	13,395,551
Toll/Managed Lane Eligible VMT	1,642,601
% Eligible	12.26
Total NEJ Daily Toll Cost (at $0.17 per mile)	$279,242
Toll Eligible Equivalent Work Trips	126,354
Daily Toll Cost per Equivalent Work Trip	$2.21
Estimated Yearly Toll Cost (at 250 days)	$553
Toll Expense Proportion of NEJ Income	**0.010**

Appendix A

Amended and Restated Policies and Procedures for Toll Collection Operations on the Alamo RMA Turnpike System

AMENDED AND RESTATED
POLICIES AND PROCEDURES

FOR TOLL COLLECTION OPERATIONS

ON THE ALAMO RMA TURNPIKE SYSTEM

SECTION 1 PURPOSE

These Amended and Restated Policies and Procedures for Toll Collection Operations ("Policies and Procedures") are established pursuant to Alamo RMA Resolution No. 07-20, adopted on October 10, 2007 and revised by Resolution No. 12-08, adopted on April 12, 2012. Under provisions of Chapter 370 of the Texas Transportation Code, ALAMO RMA possesses the authority to designate a turnpike project or a portion of a turnpike project as a controlled-access toll road (Sec. 370.179). These Policies and Procedures establish Alamo RMA practices and operations for toll collection systems on designated controlled-access toll roads operating within the Alamo RMA turnpike system, and incorporate provisions of Texas Transportation Code Sec. 370.177 regarding failure or refusal to pay turnpike project tolls and related penalties and offenses.

SECTION 2 DEFINITIONS

ACH	Automated Clearing House Network.
CSC	The Customer Service Center or its successor(s).
Electronic Toll Tag or Toll Tag or Tag	A device that records the usage of a vehicle using a toll road; usually adhered to the windshield of the vehicle, allowing motorists to drive non-stop through designated electronic toll collection lanes. (Electronic Toll Tags are a type of "transponder" pursuant to Texas Transportation Code Sec. 370.178.)
ETC	Electronic Toll Collection.
Facilities	Facilities operated by the Alamo RMA including toll and managed lanes
IVR	Interactive Voice Response.
Managed Lane	A travel lane that allows transit, registered car pool users with a tag account, and vehicles exempted by state law to use the facility for no charge. All vehicle types not mentioned above will be charged a toll fee for the usage of the lane.
Non-payment Transaction	A transaction where the customer does not pay the toll in the lane at the time of travel through the toll lane.
Non-Tagged Non-payment	Vehicles not equipped with toll tags and that do not pay the toll at the time of travel through the toll lane.

Tag Class	The Alamo RMA class that is determined using the vehicle information that is programmed in the toll tag.
Tagged Non-payment	A vehicle equipped with a toll tag that is not valid
Toll Lane	A lane operated by the Alamo RMA as a traditional turnpike lane with a fixed fee for usage paid by all drivers unless exempted by state law or these policies.
U/O	Unusual Occurrence.
VES	Violation Enforcement System.
VPC	Violation Processing Center.

SECTION 3 EXEMPTIONS FROM TOLL PAYMENT

Users of Alamo RMA Toll Facilities shall be required to pay a toll unless they are determined to be exempt under Texas State Statutes or as authorized by the Alamo RMA Board under the provisions of the Texas State Statutes.

(a) Emergency and Military Vehicles: In accordance with the provisions of Sec. 370.177, 362.901 and 541.201 of the Texas Transportation Code, the Alamo RMA will ensure that authorized emergency vehicles, as well as state and federal military vehicles, are exempt from paying tolls on the Alamo RMA toll road system.

(b) Public Transportation Vehicles: In accordance with the provisions of Sec. 370.177 and Sec 541.201 of the Texas Transportation Code and to facilitate a multi-modal transportation system that ensures safe and efficient travel for all individuals in the San Antonio Metropolitan Statistical Area, public transit vehicles operated by a public agency and having the characteristics of a bus as defined by 541.201 of the Texas Transportation Code shall be permitted free usage of any managed lanes in operation by the Alamo RMA. On traditional toll facilities without the managed lane designation, exemptions shall be established on an annual basis between the Alamo RMA and the public agency transit provider based on projected usage within the toll corridor.

(c) Registered Carpool Vehicles – In accordance with the provisions of Sec 370.177 of the Texas Transportation Code, users who are part of a registered car pool that have a declared vehicle as part of a carpool as a funded account with a tag will be able to use the managed lane facility under the operation of the Alamo RMA for no charge dependent on the technology available to implement this provision. On traditional toll facilities without the managed lane designation, the tag account will be charged the published rate for a toll tag transaction as determined by the Alamo RMA on an annual basis in accordance with these policies.

SECTION 4 PAYMENT METHODS

To promote an efficient and effective system of toll collection within the Alamo RMA system, the Alamo RMA will utilize an all-electronic system of toll collection providing for open road travel without the requirement to stop at a toll gantry or plaza.

In accordance with Sec 370.178 (d) of the Texas Transportation Code, transponder customer account information, including contact and payment information and trip data, is confidential and not subject to disclosure under Chapter 552 of the Texas Government Code.

The Alamo RMA may expand options for payment by subsequent actions and the availability of technology.

Toll Tag

a) Toll Tag – The Alamo RMA may provide toll tags to the community through storefront customer service operations, online distribution, and/or other venues that may be determined to be in the best interest of the Alamo RMA and its customers.

b) Toll Tag accounts – The Alamo RMA may provide customers with the option of having a pre-paid tag account acting as a debit card against the balance on the tag account or a linked account allowing the tag account to withdraw funds on a preset threshold.

c) Toll Tag account access – The Alamo RMA may provide storefront customer service operation, telephone and/or online customer account access for all registered account holders. Cash tag account users will be able to convert their account to a linked account via these options.

d) Tag replenishment methods – The Alamo RMA may provide customers with options for tag replenishment as outlined in this section. i) Automatic replenishment – this option will require a customer to have a linked tag account with a major credit card or bank account with authorization allowing for their funds to be withdrawn when the balance on their tag account reaches a specific threshold as outlined in the tag user account agreement. This replenishment will occur without additional action being needed by the customer. ii) Manual replenishment – this option will require a customer to routinely replenishment the tag account, either via a cash payment at one of the locations discussed under Section C or via a credit card or bank account. This option requires the customer to take the appropriate action when the tag account is approaching a zero balance and the customer is responsible for ensuring the tag account has funding in order to avoid being referred to the violation enforcement process as discussed in this policy. More details on the cash / manual replenishment method are spelled out below.

e) Toll Tag Cost – the specific cost of a toll tag may be determined by the Alamo RMA in coordination with the tag provider. The Alamo RMA may elect to utilize an existing statewide interoperable toll tag for the Alamo RMA system and will, at the time of

selection, adopt the business policies for toll tag cost in place by the operator of the tag account.

Video Tolling

Those users electing to utilize the video tolling system, in lieu of having a toll tag account, will see an additional amount, no less than 33% but no more than 50% of the total toll fees added to cover the processing costs for each video transaction in addition to a $1.00 handling charge. The specific amount of a video toll surcharge will be determined prior to operational activity by the Alamo RMA for the tolling system and will be reviewed annually.

Cash Access

As the Alamo RMA system will utilize open road tolling, customers will not be able to stop on the travel lanes to pay a toll with cash. The Alamo RMA, therefore, encourages cash customers to either utilize the video tolling option, or a pre-paid tag option in order to utilize the Alamo RMA toll system. The Alamo RMA may utilize one or more of the following options to provide cash customers access to pre-paid toll tags, allow for deposits onto toll tag accounts, or to process video toll bill:

i) Retail operations – the Alamo RMA may seek to partner with local establishments in and around the Alamo RMA operational regions to provide walk up tag operations, similar to those techniques employed by other public sector entities in the region

ii) Kiosk operations – the Alamo RMA may seek to provide kiosk locations, operating similar to Automated Teller Machines, throughout the Alamo RMA operational regions to provide for replenishment of tag accounts

iii) Store front operations – the Alamo RMA may seek to provide dedicated customer service space for tag accounts within the administrative offices of the Alamo RMA

iv) Call Center – the Alamo RMA may seek to provide a customer service operation to allow video toll bills to be paid via phone, by mail, or in person

The options listed above may be utilized in conjunction with other Alamo RMA operations to provide access to the Alamo RMA tolled lane system.

SECTION 5 TOLL INCENTIVES AND PROMOTIONS

To promote the use of Alamo RMA toll roads and to maximize the use of toll tags on Alamo RMA facilities, the Alamo RMA may offer customers incentives and discounts. All actions undertaken by this section shall be in accordance with Section 370.180 of the Texas Transportation Code.

(a) Incentive Offers: From time to time the Alamo RMA may conduct promotions or marketing activities that encourage drivers to use Alamo RMA toll roads and/or toll tag and/or reward customers for such use.

(b) Corridor specific promotions: The Alamo RMA may conduct promotions on a corridor by corridor basis to encourage drivers to use Alamo RMA toll roads and/or toll tag and/or reward customers for such use. The corridor specific promotions may be in limited duration and targeted area and may be replicated at the Alamo RMA's discretion for other corridors.

SECTION 6 CUSTOMER SERVICE AND VIOLATION POLICIES

In addition to the other powers and duties provided by Chapter 370 of the Texas Transportation Code, with regard to its toll collection and enforcement powers for its turnpike projects or other toll projects developed, financed, constructed, and operated under an agreement with the authority or another entity, an authority has the same powers and duties as the department under Chapter 228, a county under Chapter 284, and a regional tollway authority under Chapter 366 of the Texas Transportation Code. As such, the Alamo RMA may, from time to time, review and revise the customer service and violation policies to provide the highest possible experience for customers on the Alamo RMA system.

Upon implementation of the Alamo RMA toll collection system, Alamo RMA expects that there may be a high percentage of customers using a toll road who will not have a toll tag. The objective of the toll operations procedures and policies created by the Alamo RMA is to increase the percentage of toll road customers who establish toll tag accounts with the CSC. Additionally, because tolling is a new concept for customers in the South Texas region, it will take some time for customers to adjust to the toll road operations, rules and regulations. It is understood that the objective of the Alamo RMA is to collect revenue and minimize toll violation abuse; Alamo RMA believes that a moderate approach towards customers who do not pay the toll ultimately will allow for a period of adjustment as customers begin using the new toll roads, and will create new toll customers for the Alamo RMA.

The CSC provides customer service to Alamo RMA customers and supports all operations related to customer toll tag account setup, account maintenance and customer service. The efficient operation of the CSC is critical to the success of the Alamo RMA toll collections. The CSC will adhere to the following provisions with respect to customer service, toll violations, and toll tag use:

(a) Customers That Use Toll Tag Lanes Without Corresponding Toll Tags:

If a customer who believes they caused a Non-payment Transaction contacts the CSC and establishes (or re-establishes, if the customer has an invalid toll tag account) a valid, funded toll tag account within seven (7) days, or such period of time that is dictated by the terms of any agreement with the CSC, after the Non-payment Transaction was committed, the administrative fee that CSC is allowed to charge will be waived, and the unpaid toll amount will be deducted from the customer's account balance upon the customer providing proof of said action to the Alamo RMA.

In the event that the violating customer does not either open and adequately fund a new toll tag account, or adequately fund their existing toll tag account, within the specified time frame, that customer will then receive a "Notice of Nonpayment" via regular mail for the unpaid toll amount plus an administrative fee, set in accordance with state law. If the violating customer contacts the CSC within thirty (30) days after such notice is mailed, and either opens and adequately funds a new toll tag account, or adequately funds their existing toll tag account, all of the administrative fee will be waived, and any remainder of the fee not waived, plus the unpaid toll amount, will be deducted from the customer's account balance upon the customer providing proof of said action to the Alamo RMA.

(b) Violation Enforcement Strategies:

If a customer who receives a "Notice of Nonpayment" does not take any of the actions described in subsection (a) above within thirty (30) days after such notice is mailed, the Non-payment Transaction becomes an offense under Sec. 370.177 of the Texas Transportation Code, and a collection process will be implemented to attempt collection of the unpaid toll amount plus the additional administrative fee (which may include the collection agency's fees). If the collection process does not succeed in obtaining the toll amount and corresponding fees owed, the violating customer may be referred for prosecution. An offense for failure or refusal to pay a toll under Sec. 370.177 of the Texas Transportation Code is a misdemeanor subject to a fine of up to $250.00 for each offense. If convicted of the offense, a violating customer will be liable for the unpaid toll amount, plus a $100 administrative fee, plus court costs and a fine of up to $250.00. In the prosecution of an offense under Sec. 370.177, proof that the vehicle passed through a toll collection facility without payment of the proper toll, together with proof that the defendant was the registered owner or the customer of the vehicle when the failure to pay occurred, establishes the nonpayment of the registered owner. The proof may be by testimony of a peace officer or Alamo RMA employee or representative, video surveillance, or any other reasonable evidence. Under provisions of Sec. 370.177, there are certain exceptions to violation for failure to pay toll regarding rental cars and vehicles sold but for which title has not been officially transferred by TxDOT. In addition, it is a defense to prosecution if the vehicle is stolen prior to the failure to pay a toll, but only if the theft is reported to the appropriate law enforcement agency within

the required time period, as described in Section 370.177 (j) of the Texas Transportation Code.

(c) Procedures for Disputing Toll Violations:

Customers may dispute an alleged failure to pay toll violation by contacting the CSC by walk-in, telephone, regular mail, e-mail, and/or facsimile.

(d) Appealing a Toll Violation to Alamo RMA

A customer who has contacted the CSC and/or VPC and has been unable to satisfactorily resolve a dispute regarding a toll violation may submit a written appeal to the Alamo RMA. Such appeal shall be for the purposes of the customer providing the Alamo RMA with the information upon which they base their appeal. The Alamo RMA may or may not determine that there is any merit to such appeal and is not required to undertake any formal proceedings to make such determination.

SECTION 7 TOLLING POLICY FOR PHASES OF ALAMO RMA TURNPIKE PROJECT "UNDER CONSTRUCTION"

(a) For any toll project to be developed in phases, the authority may defer the commencement of toll collection operations on that phase until additional phases of the project are constructed so as to provide continuous uninterrupted travel for a distance, or to a destination, to be designated by the Board of Directors on a project specific basis. The deferral of toll collection operations shall end once the component phases of the project or the designated travel corridor as identified by the Board of Directors are "substantially complete."

(b) The phrase "substantially complete" shall mean that the toll project is open to traffic for its entire length as designated by the Board of Directors on a project specific basis. Temporary closures due to emergencies or short-term construction or maintenance operations shall not preclude a toll project from being deemed substantially complete.

(c) The authority may install signage and toll collection equipment on or along a project (or any phase thereof) indicating that toll collection operations are being deferred and that tolls will be collected on the entirety (or any portion) of the project in the future.

(d) The designation of a project as a toll project or candidate toll project in SABCMPO's then governing transportation plan or transportation improvement program prior to the time it is open to traffic shall preclude the project from being deemed a "conversion" under provisions of the Texas Transportation Code when toll collection operations begin.

(e) Notwithstanding the foregoing, the Board of Directors may, upon receipt of a written request from SABCMPO or from the Commissioners Court, waive this policy and toll a phase of project that is under construction prior to completion of the entirety of the project.

SECTION 8 PARALLEL FACILITIES

The Alamo RMA anticipates constructing new toll capacity within existing corridors in the San Antonio / Bexar County region, which will create additional choice within these corridors. As such, parallel facilities providing non-toll travel will remain available for all motorists.

SECTION 9 EQUAL ACCESSES TO ALAMO RMA SYSTEM AND AGENCY

In accordance with Title VI of the Civil Rights Act of 1965 and Executive Order 12898 relating to actions to address environmental justice in minority and low-income populations and Executive Order 13166 relating to improving access to services for persons with limited English proficiency, and relevant state law and guidance, the Alamo RMA will provide customer service access, informational pieces and operational pieces that fully comply with the directives established by each of these documents as may be amended from time to time.

The Alamo RMA primary website will be available in English and Spanish, via online based translation program, as well as other languages offered via online based translation programs.

Customer service will be offered in the predominant language(s) in the region served by the Alamo RMA, as determined by the Alamo RMA Executive Director in consultation with the Alamo RMA Board of Directors.

The Alamo RMA will comply fully with the Americans with Disabilities Act of 1990, as may be amended from time to time.

SECTION 10 TOLL SYSTEM OPERATIONS

ELECTRONIC TOLL SYSTEM

On a periodic basis, the Alamo RMA electronic toll system may undergo performance auditing to ensure operational compliance with established system specifications provided at the time of procurement of the system.

SECTION 11 TOLL RATES AND ESCALATION

INITIAL TOLL RATES

Initial toll rates may be set in the range of $0.17 to $0.50 per mile for toll facility usage, dependent on the final project financial plan as developed and approved by the Alamo RMA Board of Directors. Toll rates will be set on a project by project basis for the type of facility and with approval by the Alamo RMA Board of Directors.

ESCALATION FACTOR

The Alamo RMA toll rates will be adjusted on an annual basis. The minimum increase each year is to be set at 2.75% or the Consumer Price Index for the immediate preceding year, whichever is greater for the first ten years of operation. Starting in year eleven and for each subsequent year the minimum increase shall be 3% or the Consumer Price Index for the immediate preceding year, whichever is greater. This increase will be automatic in accordance with the bond covenants of the Alamo RMA.

SECTION 12 REVIEW AND REVISIONS

REVIEW OF TOLL POLICY

As established in this toll policy, the Alamo RMA will conduct reviews of the toll policy from time to time to ensure optimal performance and operation of the Alamo RMA toll system.

REVISIONS OF TOLL POLICY

The Alamo RMA toll policy may be revised from time to time by the Alamo RMA Board of Directors on the advice of the Alamo RMA Executive Director. All revisions will be required to comply with any outstanding bond covenants, federal and state law.